

**2013 SITE-WIDE
GROUNDWATER MONITORING REPORT**

**BNSF FORMER MAINTENANCE AND FUELING FACILITY
SKYKOMISH, WASHINGTON
CONSENT DECREE NO. 07-2-33672-9 SEA**

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1.0 INTRODUCTION

This 2013 Groundwater Monitoring Report was prepared on behalf of BNSF Railway Company (BNSF) and describes the 2013 groundwater monitoring activities performed at the BNSF Former Maintenance and Fueling Facility in Skykomish, Washington (herein referred to as the Site). Groundwater monitoring is being conducted as part of the Site remediation activities being completed in accordance with the *Cleanup Action Plan for BNSF Former Maintenance and Fueling Facility, Skykomish, Washington* dated October 2007, prepared by the Washington State Department of Ecology (Ecology) (2007a) (CAP). The groundwater monitoring activities completed at the Site in 2013 were conducted by BNSF pursuant to Consent Decree No. 07-2-33672-9 SEA between BNSF and Ecology (2007b) (Consent Decree) and are part of an integrated and comprehensive remedial action being performed at the Site. Groundwater monitoring activities were performed in accordance with the 2010 Groundwater Monitoring Plan, Appendix E of the 2010 Compliance Monitoring Plan Update (AECOM Environment [AECOM] 2010a) (2010 GWMP).

This document summarizes the groundwater monitoring completed at the Site during 2013 (Reporting Period) and includes:

- Semiannual Site-wide monitoring events completed in March and September 2013;
- Quarterly monitoring events conducted in June and December 2013; and
- Monthly monitoring of the air sparging system wells and hydraulic control and containment (HCC) system monitoring network wells from January through December 2013.

1.1 GROUNDWATER MONITORING OBJECTIVES

The objectives for the groundwater monitoring program described in the 2010 GWMP are to:

- Monitor any changes in contaminant distribution during and after implementation of cleanup actions throughout the Site;
- Provide monitoring data for groundwater in the Levee Zone to assess the effect of the cleanup actions on groundwater quality;
- Provide monitoring data to evaluate 2008 through 2013 remediation impacts on groundwater quality; and
- Provide fluid level gauging data to assess groundwater gradients and the extent of light non-aqueous-phase liquid (LNAPL) product floating on the groundwater.

1.2 SITE DESCRIPTION

The Site includes BNSF property and public and private properties within the Town of Skykomish in King County, Washington, and encompasses an area of about 40 acres. The Site is approximately bounded by the South Fork Skykomish River to the north, Town of Skykomish



city limits to the east, Old Cascade Highway to the south, and Maloney Creek to the west. Railroad Avenue separates BNSF property from the main commercial district of the Town of Skykomish.

Additional Site history and background information was presented in the Consent Decree, CAP, and in Supplemental Remedial Investigation Volume 1: Text, Tables, Figures, and Appendices A through D (The RETEC Group, Inc. [RETEC] 2002b).

1.3 REPORT ORGANIZATION

The remainder of this report is organized into the following sections:

- **Section 2—Groundwater Monitoring Network.** This section describes the monitoring well network and changes made to the network during the Reporting Period.
- **Section 3—Sampling, Analysis, and Reporting.** This section describes the procedures and protocols used to perform the monitoring activities, laboratory analyses and reporting, and subsequent data management and validation activities.
- **Section 4—Results and Discussion.** This section describes the results of the monitoring activities; specifically the fluid level gauging and analytical results from the groundwater sampling.
- **Section 5—Conclusions.** This section provides an overview of the groundwater monitoring activities conducted at the Site during the Reporting Period, and includes a summary of the data, and recommendations for future sampling events.
- **Section 6—Bibliography.** This section includes a listing of the documents cited in this report and other relevant documents providing additional background information.



2.0 GROUNDWATER MONITORING NETWORK

This section describes the wells, piezometers, and vaults that were included in the groundwater monitoring network for fluid level gauging and groundwater sampling during the Reporting Period. The wells, piezometers, and vaults sampled and the frequency of the sampling were defined in the 2010 GWMP. Groundwater monitoring locations are shown on Figure 1.

2.1 MODIFICATIONS TO THE MONITORING NETWORK

This section describes monitoring network changes implemented during the Reporting Period, including well refurbishment, well damage, and well abandonment. Modifications to the groundwater monitoring network are summarized in Table 1. Modification plans and construction and/or abandonment details prior to the Reporting Period were presented in previous Site documents. During the Reporting Period, one modification occurred to the monitoring network. Monitoring well 5-W-43 at the Site was inadvertently covered during grading activities and has not been located at this time.

2.2 SUMMARY OF GROUNDWATER MONITORING NETWORK

The current network of wells and piezometers at the Site is shown on Figure 1. Figure 1 includes only those wells and piezometers used in the monitoring network.

Table 2 summarizes monitoring activities during the Reporting Period and corresponding event dates. Tables 3 and 4 present additional details regarding the sampling and gauging frequencies of wells and vaults used in the groundwater monitoring network.

The conditional points of compliance (CPOCs) for groundwater are generally described in Section 3.4 and on Figure 6 of the CAP. The monitoring network was partially established before the CAP was issued by Ecology in October 2007. However, all wells in the network are within the area bounded by the CPOC well locations, and the locations and designations of compliance wells were approved by Ecology in the 2010 Compliance Monitoring Plan Update (AECOM 2010a). Point of compliance wells will be defined in a Long-Term Confirmational Monitoring Plan to be developed at the conclusion of active remediation pursuant to Exhibit C of the Consent Decree.



3.0 SAMPLING, ANALYSIS, AND REPORTING

This section summarizes the groundwater monitoring network sampling methods, laboratory analysis and reporting procedures, and data management and validation protocols. Groundwater samples collected during the Reporting Period were analyzed by TestAmerica Laboratories, Inc. in Tacoma, Washington (TestAmerica) for all sampling events except for the January 2013 event. The prior analytical laboratory, Pace Analytical Services, Inc. in Minneapolis, Minnesota, subcontracted the groundwater samples collected during the January 2013 event to Fremont Analytical, Inc. in Seattle, Washington prior to these services being transferred to TestAmerica. Both laboratories are accredited in the State of Washington.

3.1 SAMPLING METHODS

The sampling methodology used to gauge fluid levels and collect groundwater samples was described in the 2010 GWMP. The procedures were established for gauging and sampling monitoring wells, although these procedures apply also to piezometer and vault locations.

3.2 ANALYTICAL METHODS

The groundwater samples were analyzed for total petroleum hydrocarbons (TPH) as diesel-range organics (DRO) and as oil-range organics (ORO) by Northwest Method NWTPH-Dx. The analytical laboratory reported detected sample concentrations relative to the method detection limit (MDL) rather than the method reporting limit (MRL), which usually is higher. Because analyte concentrations detected above the MDL and below the MRL have a degree of uncertainty, these results were considered to be estimated values, and were qualified with a J-flag as indicating that the reported value is an estimate. Using the MDL to report results was intended to minimize the occurrence of non-detected results with an MRL greater than the cleanup level.

3.3 DATA MANAGEMENT AND VALIDATION

The analytical laboratory provided both text data reports (Appendix A) and electronic data deliverables that were directly imported into the project environmental data management system. A quality control check was performed on the imported data to ensure that it was accurately uploaded and that transfer errors did not occur.

Each laboratory analytical report included copies of the Chain of Custody forms and a case narrative containing the following information: a description of the case, comments on sample condition upon receipt, and a description of sample preparation and analysis. The following data were included in the data report: MDL, MRL, units of measure, dilution factor, batch number, date received, date prepared, date analyzed, analytical method, and any notes or qualifiers. The report also contained the details and results of laboratory quality assurance/quality control procedures that were performed on the samples. Analytical data were checked for completeness by a Farallon Project Scientist and data were then independently validated by Saylor Data Solutions of Bothell, Washington.



Sayler Data Solutions evaluated the groundwater data to assess whether the analytical results met the quality control/validation standards described in the 2010 GWMP. These metrics included precision, accuracy, method compliance, and completeness of the data set. Validation results were then used to evaluate whether the data were suitable for their intended use.

Data validation procedures, criteria, and findings are provided in Appendix B. Procedures used in the data validation are based on U.S. Environmental Protection Agency (EPA) (2008) guidelines for organic methods data review.



4.0 RESULTS AND DISCUSSION

This section presents a summary and evaluation of results from groundwater monitoring during the Reporting Period.

4.1 GROUNDWATER LEVELS

Table 4 summarizes the frequency of groundwater level elevation gauging at Site locations. With the exception of monitoring wells associated with the HCC system, locations are gauged on a quarterly schedule, with additional locations gauged during the semiannual monitoring events in March and September. Table 5 presents the groundwater elevation and LNAPL thickness measurements obtained during the Reporting Period. Groundwater flow direction, variations in groundwater elevations and LNAPL thickness, and changes in groundwater gradients in relation to seasonal variations and remediation activities are discussed below.

Quarterly and semiannual groundwater surface elevation maps for the Reporting Period are shown on Figures 2 through 5. As shown on these figures, the groundwater flow direction is generally consistent, given seasonal variation and periodic adjustments to pumping rates along the HCC system barrier wall. Groundwater elevations did fluctuate seasonally by approximately 4.5 feet (ranging from 4.3 to 4.7 feet) in piezometers adjacent to and south of the HCC system barrier wall, and by approximately 2.5 (ranging from 0.85 to 5.3) feet adjacent to and north of the HCC system barrier wall, with some influence imparted by HCC system pumping rates. The difference in groundwater elevations from north to south across the central part of the HCC system barrier wall varied between approximately 6.4 feet in March 2013 and approximately 3.5 feet in September 2013 as measured in piezometers and monitoring wells. Flow in this area is influenced by seasonal variations and HCC pumping system rates. South of the HCC system barrier wall, groundwater flow is predominantly toward the northwest or west. North of the HCC system barrier wall, groundwater typically flows to the northwest in the direction of the Skykomish River. The HCC system barrier wall acts as a barrier to groundwater flow and accentuates a westerly component to groundwater flow in the area of the HCC system barrier wall. Localized groundwater depressions are present near the HCC system barrier wall gates due to pumping of recovery wells on the south side of the HCC system barrier wall.

Groundwater surface elevation maps continue to show that groundwater elevations are lower in the Levee Zone due in part to the presence of impermeable liner/barrier systems along the up-gradient boundaries (south and east) of the prior Levee Zone excavations in 2006 and subsequently in 2010 and 2013. The extent of the original liner/barrier system is described in the *Levee Zone Interim Action for Cleanup - 2007 As-Built Completion Report, Former Maintenance and Fueling Facility – Skykomish, Washington* dated August 2007, prepared by ENSR (2007). Excavation at the Skykomish School in June, July, and August 2013 occurred in the area of the underground liner which was replaced along the eastern and southern extents of the 2103 excavation. The Skykomish School excavation work is described in the 2013 As-Built Completion Report being prepared by Farallon (2014a).



4.2 FIELD PARAMETERS

Table 6 presents the stabilized field parameter measurements collected during the monthly, quarterly, and semiannual groundwater sampling events from each of the wells that did not contain LNAPL. Each field parameter is discussed separately below.

4.2.1 pH

The average pH of groundwater across the Site during the Reporting Period was 6.02. The minimum pH was 4.40 at monitoring well 1A-W-4 on March 20, 2013, and the maximum pH was 7.67 at monitoring well 5-W-54 on March 19, 2013. The average, minimum, and maximum pH measurements were consistent with past measurements at the Site.

4.2.2 Temperature

The average temperature of groundwater during the Reporting Period was 10.3 degrees Celsius (°C). The minimum temperature was 3.82°C at monitoring well 2A-W-10 on March 19, 2013, and the maximum temperature was 16.9°C at monitoring well 1B-W-23 on June 18, 2013. The groundwater temperatures recorded varied seasonally consistent with prior monitoring events at the Site.

4.2.3 Dissolved Oxygen

The average dissolved oxygen (DO) concentration in groundwater across the Site during the Reporting Period was 3.51 milligrams per liter (mg/l). DO levels ranged from a minimum of 0.05 mg/l at monitoring well 2A-W-10 on September 18, 2013 to a maximum of 11.31 mg/l measured at monitoring well EW-2A on September 18, 2013. In general, monitoring wells with no detected petroleum hydrocarbon compounds exhibited higher concentrations of DO than monitoring wells with detected petroleum hydrocarbon compounds. These measurements are consistent with historical values.

4.2.4 Oxidation-Reduction Potential

The average oxidation-reduction potential (ORP) in groundwater across the Site during the Reporting Period was 160 millivolts (mV). The minimum ORP value was -200 mV at monitoring well 5-W-50 on September 16, 2013 and the maximum was 396 mV at monitoring well 1C-W-1 on January 29, 2013. ORP in groundwater at the Site is most-commonly positive. A positive ORP and DO in excess of approximately 1 mg/l indicates that conditions are conducive to aerobic degradation of petroleum hydrocarbons. These measurements were consistent with historical values.

4.2.5 Turbidity

The mean turbidity value in groundwater across the Site during the Reporting Period was 16 nephelometric turbidity units (NTU). Turbidity values ranged from 0 NTU at 14 monitoring wells in 2013, to a maximum of 488 NTU measured at monitoring well 1B-W-23 on June 18, 2013. Approximately 88 percent of the turbidity measurements during this reporting period were below 25 NTU. In the previous groundwater monitoring report, approximately 90 percent of the turbidity measurements were below 25 NTU. As noted in the two groundwater monitoring



reports prepared prior to the Reporting Period, about 90 percent of the turbidity measurements were below 10 NTU.

4.3 NWTPH-DX

4.3.1 Applicable Groundwater Cleanup and Remediation Levels

The groundwater cleanup level (CUL) for TPH measured using NWTPH-Dx is 208 micrograms per liter ($\mu\text{g/l}$) and the remediation level (RL) is 477 $\mu\text{g/l}$ as specified in Section 3.4 and Table 1 of the CAP. The CAP anticipates that CULs will be attained at the CPOC following implementation of all cleanup actions specified in the CAP. The approximate CPOC boundary is shown on Figure 6 of the CAP. As described in the CAP, the CUL for petroleum hydrocarbons in groundwater is intended to protect sediments from recontamination by groundwater (e.g., near the South Fork Skykomish River and Former Maloney Creek) and the RL for petroleum hydrocarbons in groundwater is intended to be protective of drinking water resources.

4.3.2 Analytical Results

Petroleum hydrocarbon concentrations in groundwater were analyzed using Northwest Method NWTPH-Dx with no silica gel cleanup. DRO and ORO hydrocarbon fractions were added together to calculate a total NWTPH-Dx TPH concentration (referred to herein as NWTPH-Dx). If both DRO and ORO fractions were detected, NWTPH-Dx was calculated to be the sum of both detected concentrations. If either the DRO or the ORO fractions were not detected at or above the MDL, half of the MDL value was used to represent the non-detected component in the NWTPH-Dx summation which was then denoted as detected. If both components were not detected at or above the MDL, half of the MDL value of both components was added to represent the NWTPH-Dx reporting value that was then denoted as not detected. Table 7 shows NWTPH-Dx results and the NWTPH-Dx concentrations. Figures 6 through 9 depict the groundwater NWTPH-Dx concentrations on Site plan maps for the two quarterly and the two semiannual monitoring events conducted during the Reporting Period, and also show the estimated extent of LNAPL present at the Site.

Site-wide groundwater sampling was conducted on a semiannual schedule (March and September). In addition, select wells down-gradient of the HCC system, adjacent to the Former Maloney Creek Zone-East Wetland, the Levee Zone, and the HCC system gate and end wells were sampled on a quarterly schedule (June and December in addition to semiannual monitoring in March and September). Air sparging system wells were monitored and sampled on a monthly schedule.

Provided in the following sections is a discussion of the results of the semiannual Site-wide events (March and September 2013). Later discussions pertain to results of more frequent monitoring events. Trend plots showing historical NWTPH-Dx groundwater monitoring results for the monitoring wells included in the current monitoring well network are provided in Appendix C.



4.3.3 Results from Semiannual Site-Wide Groundwater Monitoring Events

While 56 locations were planned for groundwater sampling during the March and September 2013 semiannual groundwater monitoring events (Table 3), 55 groundwater samples were collected during each of the events. Groundwater samples were not collected if monitoring wells contained LNAPL.

Monitoring well 5-W-51 was planned for semiannual groundwater sampling but was not sampled during the Reporting Period because it contained LNAPL during both semiannual monitoring events. LNAPL has historically been measured in monitoring well 5-W-51 with the highest accumulations noted during elevated groundwater conditions in March (about 9.6 inches during the March 2013 monitoring event) and smallest accumulation during low groundwater conditions in September (about 0.24 inches during the September 2013 monitoring event). During the prior 2012 reporting period, LNAPL accumulations were measured in monitoring well 5-W-51 with thicknesses measured at 7.1 inches and 1.1 inches for the March and September 2012 monitoring events respectively. Monitoring well 2A-W-9 was planned for semiannual groundwater sampling during the Reporting Period but was not sampled during the September semiannual monitoring event because a trace of LNAPL was noted to be present. Monitoring well 2A-W-9 does not have a history of LNAPL accumulation although NWTPH-Dx concentrations have frequently exceeded the NWTPH-Dx RL at this location.

One unplanned monitoring well, 2A-W-8, was sampled during the September event to evaluate DRO and ORO concentrations at an up-gradient location.

The Site-wide discussion below pertains to data collected during the March and September 2013 semiannual groundwater monitoring events at all sampled locations, with the exception of the air sparging system monitoring wells and the HCC system monitoring wells which are discussed separately below in Sections 4.3.4 and 4.3.5, respectively. NWTPH-Dx results from the March and September 2013 semiannual monitoring events are shown on Figures 6 and 8 as NWTPH-Dx, and the analytical results are presented in Table 7.

4.3.3.1 March 2013

The March 2013 semiannual groundwater monitoring event occurred from March 18 through 20, 2013. Groundwater samples were collected from 26 monitoring wells at the Site (not including air sparging area and HCC system wells) during this Reporting Period. NWTPH-Dx was detected in 18 of the 26 groundwater samples collected during the March 2013 monitoring event. Detected NWTPH-Dx concentrations ranged from 44.5 to 1,960 µg/l, six of which exceeded the RL of 477 µg/l.

In March 2013, NWTPH-Dx RL exceedances occurred in groundwater samples collected from monitoring wells 5-W-15 and 5-W-50; 2A-W-9 and 2A-W-10; 1C-W-4; and 2A-W-42. The RL exceedances in groundwater samples collected from monitoring wells 5-W-15 in 6th Street and in 5-W-50 at the Skykomish School occurred at locations proximate to a residual LNAPL plume at the Skykomish School. NWTPH-Dx was detected at a concentration of 830 µg/l in the groundwater sample collected from monitoring well 5-W-15. NWTPH-Dx was detected at a concentration of 900 µg/l during the March 2012



monitoring event with concentrations ranging between 240 and 900 µg/l in groundwater samples collected from monitoring well 5-W-15 during the prior 2012 reporting period. LNAPL accumulations have not been observed in monitoring well 5-W-15. NWTPH-Dx was detected at a concentration of 1,960 µg/l in the groundwater sample collected from monitoring well 5-W-50 in March 2013. NWTPH-Dx was detected at a concentration of 2,660 µg/l during the March 2012 event with concentrations ranging between 1,480 and 2,660 µg/l in groundwater samples collected from monitoring well 5-W-50 during the prior 2012 reporting period. LNAPL accumulations have not been observed in monitoring well 5-W-50. During the March 2013 monitoring event, approximately 9.6 inches of LNAPL was measured in monitoring well 5-W-51, approximately 80 feet south of monitoring wells 5-W-15 and 5-W-50. During the prior 2012 reporting period, RL exceedances also occurred during the March semiannual monitoring event in the vicinity of the Skykomish School (monitoring wells 5-W-15, 5-W-50, 5-W-51, and 5-W-56).

NWTPH-Dx RL exceedances occurred in groundwater samples collected from monitoring wells 2A-W-9 and 2A-W-10 in the railyard near a former LNAPL area. A trace of LNAPL was observed in monitoring well 2A-W-9 for the first time during the September 2013 monitoring event. During the March 2013 monitoring event, NWTPH-Dx was detected at a concentration of 1,370 µg/l in the groundwater sample collected from monitoring well 2A-W-9. NWTPH-Dx was detected at a concentration of 1,060 µg/l during the March 2012 event with concentrations ranging between 350 and 4,300 µg/l in groundwater samples collected from monitoring well 2A-W-9 during the prior 2012 reporting period. NWTPH-Dx was detected at a concentration of 980 µg/l in the groundwater sample collected from monitoring well 2A-W-10. NWTPH-Dx was calculated to be 610 µg/l during the March 2012 event with concentrations ranging between 215 and 610 µg/l in groundwater samples collected from monitoring well 2A-W-10 during the prior 2012 reporting period..

NWTPH-Dx RL exceedances occurred during the March 2013 groundwater monitoring event in groundwater samples collected from monitoring well 1C-W-4 north of the air sparging system area and from monitoring well 2A-W-42 along the north side of the HCC system barrier wall between the center and east vaults. During the March 2013 sampling event, NWTPH-Dx was detected at a concentration of 810 µg/l in the groundwater sample collected from monitoring well 1C-W-4. NWTPH-Dx was detected at a concentration of 420 µg/l during the March 2012 event with concentrations ranging between 144 and 420 µg/l in groundwater samples collected from monitoring well 1C-W-4 during the prior 2012 reporting period. Since 2009, the NWTPH-Dx RL was exceeded only twice before in monitoring well 1C-W-4. During the two monitoring events in 2010, NWTPH-Dx was detected at concentrations of 540 and 620 µg/l in groundwater samples collected from monitoring well 1C-W-4 in March and September 2010, respectively. Overall NWTPH-Dx concentrations at this location have shown a decreasing trend since 2007. During the March 2013 groundwater monitoring event, NWTPH-Dx was detected at a concentration of 1,020 µg/l in the groundwater sample collected from monitoring well 2A-W-42. NWTPH-Dx has not previously been detected above the RL in groundwater samples collected from monitoring well 2A-W-42.



NWTPH-Dx was detected at a concentration of 133.5 µg/l during the March 2012 event with concentrations ranging between 77.5 and 221 µg/l in groundwater samples collected from monitoring well 2A-W-42 during the prior 2012 reporting period. Prior to March 2013, the maximum NWTPH-Dx concentration was 420 µg/l detected in a groundwater sample collected in September 2009. The March 2013 NWTPH-Dx concentration at this location appears to be anomalous relative to the data collected since 2009 and during the other three quarters of 2013. As discussed below in Section 4.3.6, during the March 2013 groundwater monitoring event, groundwater samples were collected from Levee Zone monitoring wells 5-W-14 through 5-W-19. With the exception of monitoring well 5-W-15 discussed above, NWTPH-Dx was not detected at concentrations exceeding the RL or the CUL in the Levee Zone monitoring wells during the March 2013 monitoring event. NWTPH-Dx was not detected in monitoring wells 5-W-17 and 5-W-19 during the March 2013 groundwater monitoring event.

4.3.3.2 September 2013

The September 2013 semiannual groundwater monitoring event occurred from September 16 through 18, 2013. Groundwater samples were collected from 26 monitoring wells at the Site (not including air sparging area and HCC system wells) during this Reporting Period. NWTPH-Dx was detected in 2 of the 26 groundwater samples collected during September 2013 monitoring as discussed below.

In September 2013, NWTPH-Dx detections and RL exceedances occurred in groundwater samples collected from monitoring wells 5-W-50 and 5-W-56 at the Skykomish School. NWTPH-Dx was detected at a concentration of 2,260 µg/l in the groundwater sample collected from monitoring well 5-W-50. NWTPH-Dx was detected at a concentration of 1,480 µg/l during the September 2012 event with concentrations ranging between 1,480 and 2,660 µg/l in groundwater samples collected from monitoring well 5-W-50 during the prior 2012 reporting period. NWTPH-Dx was detected at a concentration of 2,620 µg/l in the groundwater sample collected from monitoring well 5-W-56. NWTPH-Dx was detected at a concentration of 830 µg/l during the March 2012 monitoring event with concentrations ranging between 830 and 3,540 µg/l in groundwater samples collected from monitoring well 5-W-56 during the prior 2012 reporting period. Monitoring wells 5-W-50 and 5-W-56 are proximate to a residual LNAPL plume. During this monitoring event, approximately 0.24 inches of LNAPL was measured approximately 80 feet south and southeast of monitoring wells 5-W-50 and 5-W-56 in monitoring well 5-W-51. During the prior 2012 reporting period, RL exceedances also occurred in groundwater samples collected during the September semiannual monitoring event in the vicinity of the Skykomish School (monitoring wells 5-W-15, 5-W-50, and 5-W-56).

As discussed below in Section 4.3.6, during the September 2013 groundwater monitoring event, groundwater samples were collected from Levee Zone monitoring wells 5-W-14 through 5-W-19. NWTPH-Dx was not detected in these monitoring wells during the September 2013 monitoring event.



As indicated in the data validation report for the September 2013 monitoring event in Appendix B, DRO and ORO were detected in laboratory quality control blanks. Also, selected samples were re-extracted and re-analyzed as a result of poor correlation between laboratory control duplicates and the original analysis results. A number of sample results reported by the laboratory as detected values were considered not detected by the data validator due to blank contamination and are shown with elevated reporting limits in Table 7.

4.3.4 Air Sparging System Monitoring

Groundwater samples were collected from air sparging system monitoring wells 1C-W-1, 1C-W-7, and 1C-W-8 on a monthly basis through June 2013. Beginning with the monthly groundwater monitoring event in July 2013, Ecology requested that monitoring well 1B-W-3 be monitored instead of monitoring well 1C-W-1 as it is more representative of groundwater quality down-gradient of the air sparging area. With Ecology concurrence, operation of the air sparging system was discontinued in May 2013 with groundwater monitoring continuing on a monthly schedule.

NWTPH-Dx results from these events are shown on Figures 6 through 9 (for the quarterly and semiannual sampling events) and in Table 7 (12 monthly events). A total of 37 groundwater samples were collected from the air sparging system monitoring wells during the Reporting Period. NWTPH-Dx was detected in 24 of the 37 samples. Detected NWTPH-Dx concentrations in the samples ranged from 63 to 820 µg/l. The calculated NWTPH-Dx concentrations exceeded the RL in groundwater samples collected from monitoring well 1C-W-8 during the January, March, and November sampling events in the Reporting Period: Air sparging system groundwater monitoring results are described and evaluated further in the 2013 Annual Air Sparging System Report (Farallon 2014b).

4.3.5 Hydraulic Control and Containment System

The following sections summarize the groundwater analytical results from wells that monitor the HCC system and adjacent areas. Quarterly monitoring was completed during the Reporting Period for the HCC system monitoring wells in the HCC system backfill and down-gradient of the HCC system barrier wall, and for the HCC system end and gate monitoring wells. NWTPH-Dx in groundwater samples collected from HCC system monitoring wells did not exceed the RL during the Reporting Period. NWTPH-Dx results for groundwater samples collected during the Reporting Period are shown on Figures 6 through 9 and in Table 7. The results from the HCC system well monitoring events are described and evaluated further in the 2013 Annual Hydraulic Control and Containment System Operations Report being prepared by Farallon (2014c).

4.3.5.1 Backfill and Down-gradient of the HCC

Groundwater samples were collected quarterly from groundwater monitoring wells within the backfill placed during the HCC system barrier wall construction and down-gradient of the HCC system barrier wall at monitoring wells 1B-W-23, 1C-W-7, 2A-W-40, 2A-W-41, and 2A-W-42. As indicated in Table 1, monitoring well 5-W-43 has not been located after being covered during grading activities in the area and was not



sampled during the Reporting Period. An exception to the quarterly sampling frequency was monitoring well 1C-W-7, which was sampled monthly because it is also used to monitor the performance of the air sparging system. A total of 29 groundwater samples were collected throughout the Reporting Period from the five backfill and down-gradient monitoring wells and NWTPH-Dx was detected in 16 of the 29 groundwater samples. Detected calculated NWTPH-Dx concentrations in the groundwater samples ranged from 60.5 to 1,020 µg/l. Of the 16 groundwater samples with detected NWTPH-Dx, NWTPH-Dx was detected once exceeding the RL at a concentration of 1,020 µg/l in the groundwater sample collected from monitoring well 2A-W-42 in March 2013 (see Section 4.3.3.1). NWTPH-Dx concentrations did not exceed the RL in groundwater samples collected from monitoring well 2A-W-42 in subsequent monitoring events in 2013 and NWTPH-Dx was not detected at this location during the September 2013 monitoring event.

4.3.5.2 HCC System Performance

Groundwater samples were collected quarterly throughout the Reporting Period from monitoring wells EW-1 and EW-2A located at the west and east ends of the HCC system barrier wall, respectively. DRO and ORO were detected in one of the four groundwater samples collected from monitoring well EW-1 on the west end of the HCC system barrier wall (December 2013 monitoring event), and in one of the four groundwater samples collected from monitoring well EW-2A at the east end of the HCC system barrier wall (December 2013 monitoring event). NWTPH-Dx concentrations were below the RL in each of these two groundwater samples.

Groundwater samples were collected quarterly during the Reporting Period from gate monitoring wells GW-1 through GW-4. A total of 16 groundwater samples were collected from these four locations during the Reporting Period. DRO and/or ORO were detected in 6 of the 16 samples. Calculated NWTPH-Dx concentrations were detected at concentrations from 85 to 334 µg/l in these six groundwater samples and did not exceed the RL.

Groundwater samples were collected from the gate sentry monitoring wells during the semiannual monitoring events in March and September 2013. Gate sentry wells are intended to enable monitoring of petroleum hydrocarbon concentrations in the reactive material in each gate to evaluate treatment capacity and exhaustion rates. Petroleum hydrocarbon constituents in groundwater at these locations are removed by the reactive media. Therefore, these results are not representative of Site groundwater conditions, and are not evaluated in this report. The groundwater results for the semiannual events are presented in Table 7 for reference.

The procedures identified in the CAP require that groundwater samples be collected from the gate sentry monitoring wells following an HCC system shutdown lasting more than 48 hours. Two HCC system shutdowns longer than 48 hours occurred during the Reporting Period. The first HCC system shutdown lasting longer than 48 hours occurred between February 16 and 18, 2013 due to a programmable logic controller error which



was repaired. In accordance with the procedures identified in the CAP, gate sentry monitoring wells were sampled on February 21, 2013 and there were no NWTPH-Dx RL exceedances. The second HCC system shutdown lasting more than 48 hours occurred between September 9 and 12, 2013 for planned system cleaning, granular activated carbon change-out, and conveyance piping replacement within the treatment building. Ecology was notified in advance of the scheduled maintenance shutdown. The HCC system was restarted on September 13, 2013. Per the procedures identified in the CAP, gate sentry monitoring wells were sampled on September 17, 2013 coinciding with the September semiannual groundwater monitoring event and there were no NWTPH-Dx RL exceedances based on the detected data. However, substantively elevated reporting limits were identified during data validation at one sentry well location due to the presence of contamination in the associated method blank resulting in a calculated NWTPH-Dx concentration that exceeded the RL (Appendix B).

4.3.6 Levee Zone

Results of groundwater sampling of Levee Zone monitoring wells 5-W-14 to 5-W-19 during the semiannual groundwater monitoring events in March and September 2013 are summarized above in Section 4.3.3. This section presents results for all four quarters including the March and September 2013 semiannual groundwater monitoring events.

Groundwater samples were collected quarterly during the Reporting Period from the six Levee Zone monitoring wells. NWTPH-Dx results from these quarterly events are shown on Figures 6 through 9 as NWTPH-Dx, and the analytical results are presented in Table 7. A total of 24 groundwater samples were collected from Levee Zone monitoring wells during the Reporting Period. NWTPH-Dx was detected at concentrations between 33 to 830 $\mu\text{g}/\text{l}$ in 12 of the 24 groundwater samples. NWTPH-Dx was detected in excess of the CUL in groundwater samples collected from two of the six Levee Zone monitoring wells, including monitoring well 5-W-15 (830, 350, and 670 $\mu\text{g}/\text{l}$ during the March, June, and December monitoring events, respectively) and 5-W-18 (230, 300, and 240 $\mu\text{g}/\text{l}$ during the March, June, and December monitoring events, respectively). NWTPH-Dx was detected in excess of the RL in the groundwater samples collected from monitoring well 5-W-15 during the March and December 2013 monitoring events.

Monitoring well 5-W-15 is located within the 2006 interim cleanup action area, and both monitoring wells 5-W-15 and 5-W-18 are proximate to the Skykomish School where accumulations of LNAPL have been measured.

NWTPH-Dx has not been detected at concentrations exceeding either the CUL or the RL in the other Levee Zone monitoring wells 5-W-14, 5-W-16, 5-W-17, and 5-W-19.

4.3.7 Former Maloney Creek Zone – East Wetland and Surrounding Area

Groundwater samples were collected quarterly from monitoring wells 2A-W-9, 2A-W-10, 2B-W-4, MW-3, and MW-4 adjacent to the Former Maloney Creek Zone-East Wetland during the Reporting Period. As discussed above, monitoring well 2A-W-9 was not sampled during the September 2013 monitoring event because a trace of LNAPL was observed in the well.



Monitoring well 2A-W-9 was not sampled during the December 2013 monitoring event because it was inadvertently missed. NWTPH-Dx results from these events are presented in Table 7 and are shown on Figures 6 through 9.

A total of 18 groundwater samples were collected throughout the Reporting Period from the five Former Maloney Creek Zone groundwater monitoring locations. NWTPH-Dx was detected in 13 of the 18 samples. NWTPH-Dx concentrations in these samples ranged from 47 to 1,370 $\mu\text{g/l}$ of which three exceeded the RL.



5.0 CONCLUSIONS

This report presents the results of groundwater monitoring performed during the 2013 Reporting Period. The groundwater elevation and analytical data collected throughout the Reporting Period were compared to previous monitoring data and the RL and CUL established for the Site. These data indicate that groundwater flow gradients are relatively consistent throughout the year and similar to gradients observed during previous monitoring events.

Site-wide analytical data collected during the Reporting Period indicate that the overall extent of the LNAPL and dissolved plumes remained relatively stable. The estimated extent of LNAPL at the Site is depicted in Figures 6 through 9 for the four quarterly monitoring events in the Reporting Period and shows LNAPL thicknesses measured during each event and estimated extent of inferred LNAPL based on prior monitoring events. Up to about 1.7 feet of LNAPL were measured during the Reporting Period along sections of the south side of the HCC system barrier wall and up to about 9.6 inches of LNAPL were measured in one monitoring well in the area proximate to the Skykomish School. The thickest accumulations were measured west of the center gate along the HCC system barrier wall between the central and western vaults. Heavy sheens were noted in recovery and monitoring wells in the railyard and within about 150 feet south of the thickest accumulations. A sheen was noted in monitoring well MW-11 within about 150 feet south of the eastern vault during all four quarterly monitoring events and, for the first time, in monitoring well 2A-W-9 south of the railyard during the September 2013 monitoring event. LNAPL mobility is monitored as part of the HCC system operations (Farallon 2014c).

Groundwater NWTPH-Dx concentrations during the Reporting Period exceeded the CUL of 208 $\mu\text{g/l}$ and/or the RL of 477 $\mu\text{g/l}$ at monitoring wells down-gradient of and immediately adjacent to areas currently or formerly containing LNAPL. A total of 56 wells were sampled, with samples from 52 monitoring wells collected during the Reporting Period having at least one detection of NWTPH-Dx. Of these detections, samples from two of the monitoring wells in the Levee Zone exceeded the CUL, and samples from eight Site monitoring wells exceeded the RL. The data do not indicate significant migration of LNAPL or changes in NWTPH-Dx concentrations during the Reporting Period. The data indicate that the HCC system is effectively preventing LNAPL and NWTPH-Dx from passing through the HCC system barrier gates.

Site-wide groundwater monitoring has been conducted quarterly at the Site since 2006 and nearly the entire Site cleanup has been performed with the exception of cleanup beneath the Skykomish School building. Treatment beneath the Skykomish School building using Hot Water Flushing will likely begin in 2015, pending negotiation of Access Agreements with the Skykomish School District. Based on the results of the groundwater monitoring and sampling performed since 2006, BNSF proposes to modify the quarterly (June and December) groundwater monitoring events to focus the sampling and gauging activities in the areas proximate to the HCC barrier wall to ensure that established objectives for containment of contaminated groundwater within the railyard are achieved. With Ecology concurrence, these modifications will be documented in an addendum to the Groundwater Monitoring Plan that has been prepared for the Site (AECOM 2010a). Upon completion of all cleanup actions specified in the CAP, groundwater monitoring will be conducted in accordance with a Long-Term



Confirmational Monitoring Plan, which will be prepared and submitted to Ecology in accordance with Exhibit C of the Consent Decree. In advance of developing the Long-Term Confirmational Monitoring Plan, BNSF proposes the aforementioned change to the groundwater monitoring activities.



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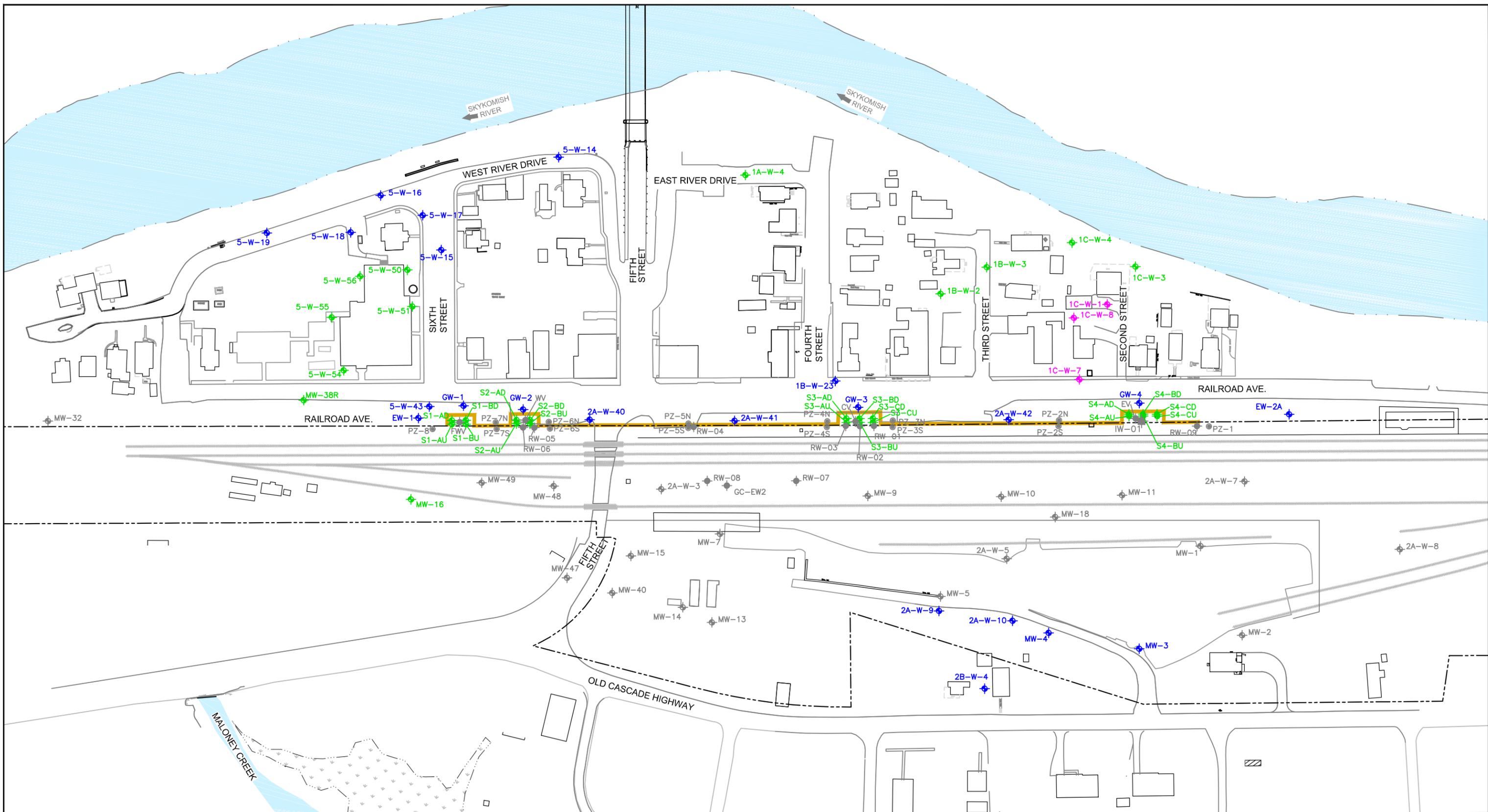


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FIGURES

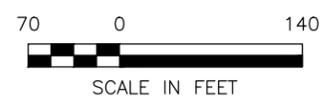
2013 SITE-WIDE
GROUNDWATER MONITORING REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-043



LEGEND

- 2A-W-41 ◆ MONITORING WELL
- RW-04 ● RECOVERY WELL
- PZ-5S ⊙ PIEZOMETER
- IW-02 ⊠ INJECTION WELL
- FMW ● VAULT WELL
- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM BARRIER WALL
- - - BNSF PROPERTY LINE
- ◆ WELLS SAMPLED MONTHLY
- ◆ WELLS SAMPLED QUARTERLY (ALSO INCLUDES WELLS SAMPLED MONTHLY)
- ◆ WELLS SAMPLED SEMIANNUALLY (ALSO INCLUDES WELLS SAMPLED MONTHLY AND QUARTERLY)
- GAUGE WELLS

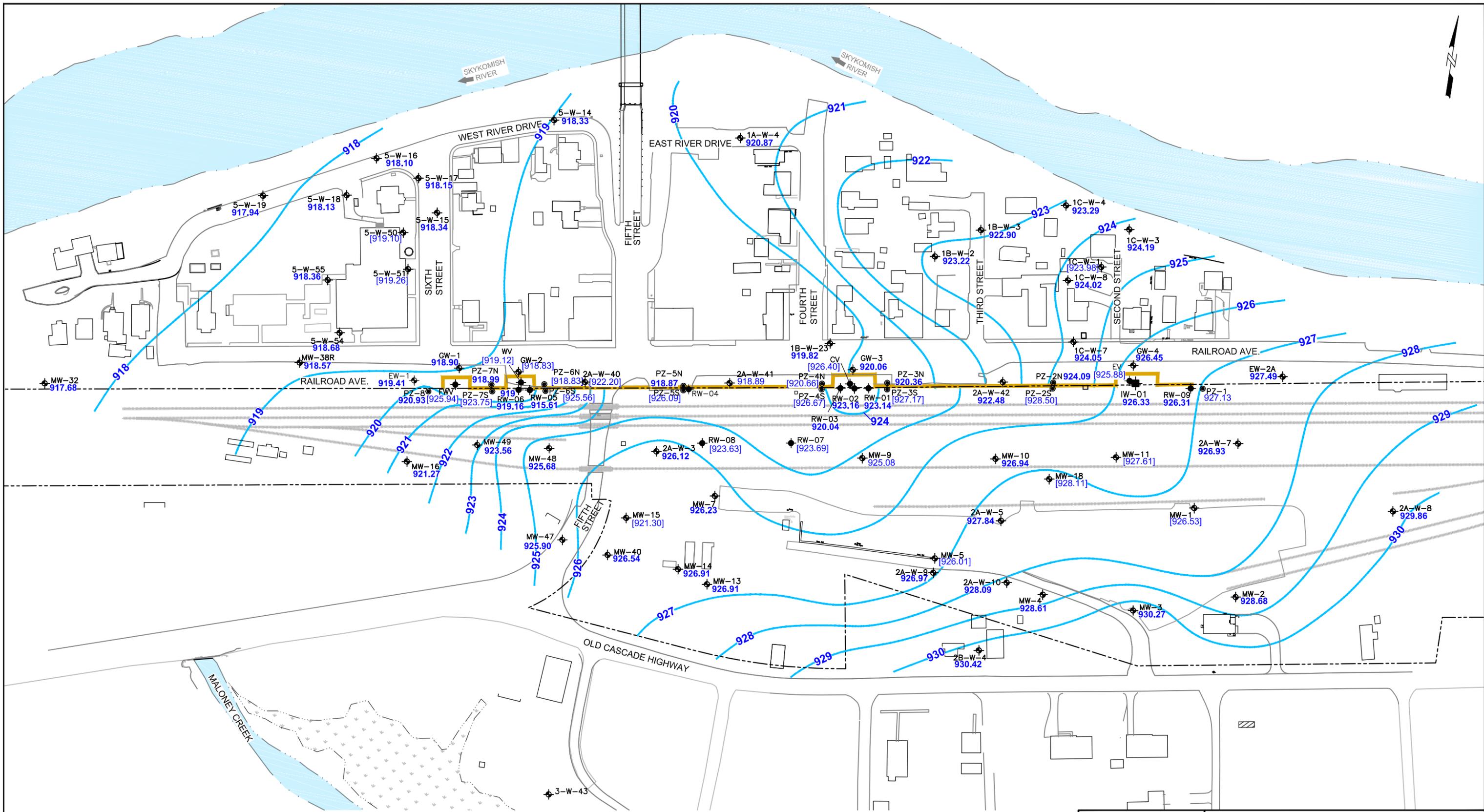


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FIGURE 1
SITE PLAN SHOWING
GROUNDWATER MONITORING NETWORK
BNSF FORMER MAINTENANCE
AND FUELING FACILITY
SKYKOMISH, WASHINGTON

FARALLON PN: 683-043

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- 2A-W-41 ◆ MONITORING WELL
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FMW ● VAULT WELL

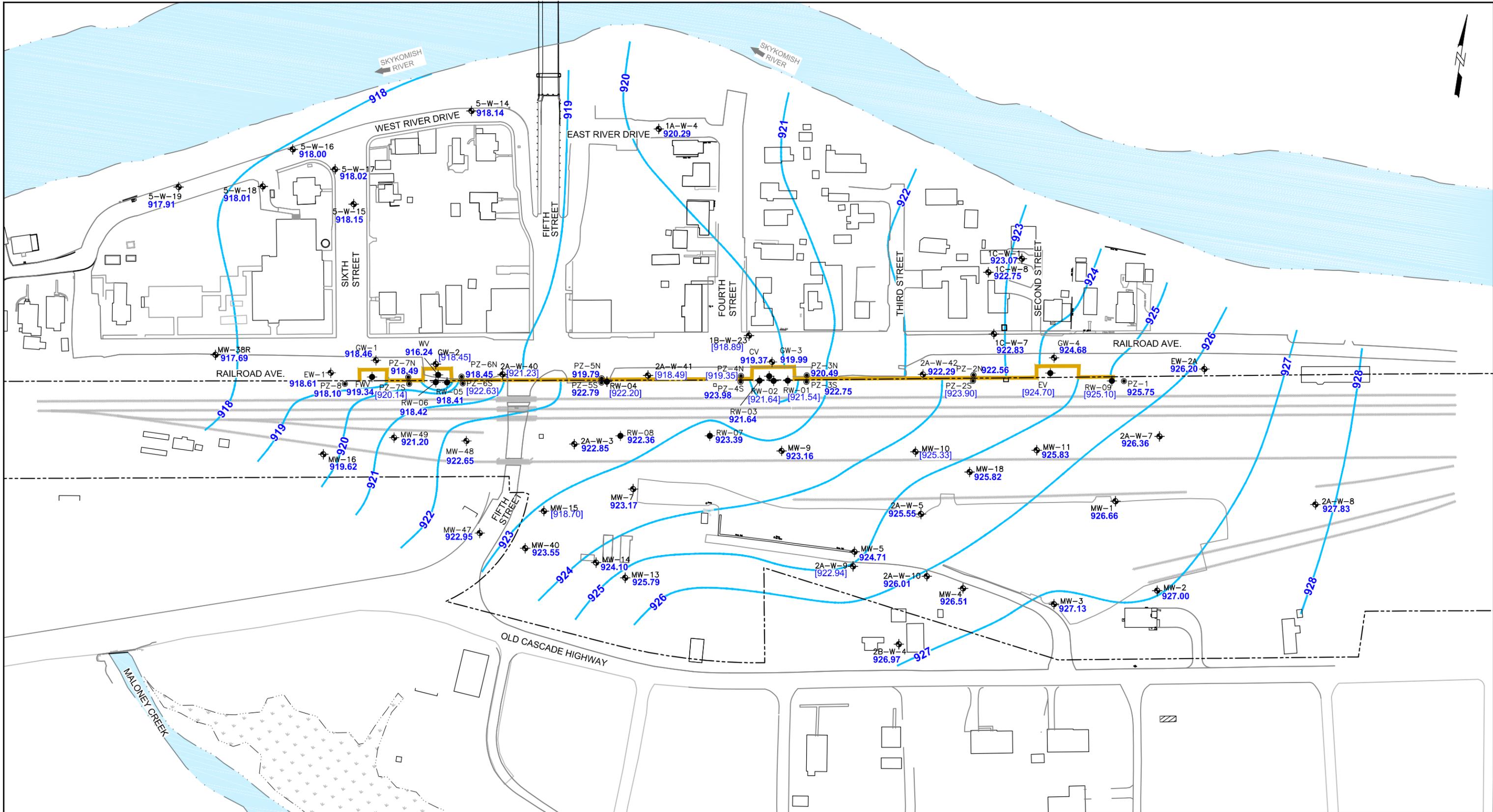
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- 927.23 GROUNDWATER ELEVATION (MARCH 18, 2013)
- [923.12] GROUNDWATER ELEVATION NOT CONSIDERED FOR CONTOURING PURPOSES
- 928— APPROXIMATE GROUNDWATER ELEVATION CONTOUR
- - - - - BNSF PROPERTY LINE

NOTE:
 SOME OF THE MEASURED HEAD VALUES IN CLOSE PROXIMITY TO THE BARRIER WALL MAY EXHIBIT SOME VARIABILITY/SLIGHT INCONSISTENCY WITH THE INTERPRETED CONTOURS. THIS COULD BE ATTRIBUTED TO VARIABILITY OF MEASUREMENT PRACTICE WITH RESPECT TO VAULT LIDS.



FIGURE 2
 MARCH 2013
 GROUNDWATER ELEVATION CONTOUR MAP
 BNSF FORMER MAINTENANCE AND
 FUELING FACILITY
 SKYKOMISH, WASHINGTON
 FARALLON PN: 683-043



- 2A-W-41 ◆ MONITORING WELL
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FMW ● VAULT WELL

LEGEND

- 927.58 GROUNDWATER ELEVATION (JUNE 17, 2013)
- [919.86] GROUNDWATER ELEVATION NOT CONSIDERED FOR CONTOURING PURPOSES
- 928— APPROXIMATE GROUNDWATER ELEVATION CONTOUR
- BNSF PROPERTY LINE

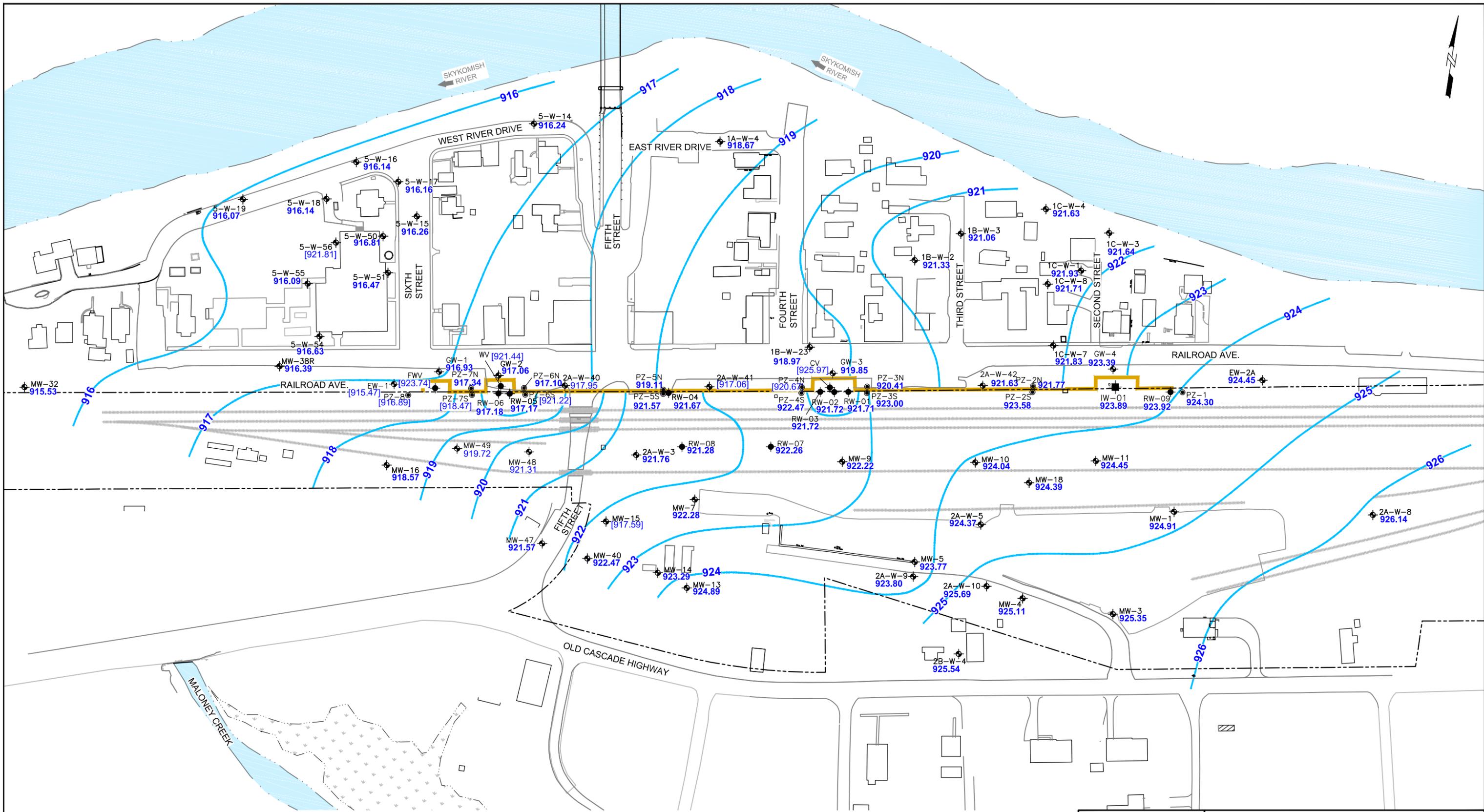
NOTE:
 SOME OF THE MEASURED HEAD VALUES IN CLOSE PROXIMITY TO THE BARRIER WALL MAY EXHIBIT SOME VARIABILITY/SLIGHT INCONSISTENCY WITH THE INTERPRETED CONTOURS. THIS COULD BE ATTRIBUTED TO VARIABILITY OF MEASUREMENT PRACTICE WITH RESPECT TO VAULT LIDS.




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FIGURE 3
 JUNE 2013
 GROUNDWATER ELEVATION CONTOUR MAP
 BNSF FORMER MAINTENANCE AND
 FUELING FACILITY
 SKYKOMISH, WASHINGTON
 FARALLON PN: 683-043

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- 2A-W-41 ◆ MONITORING WELL
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FMW ● VAULT WELL

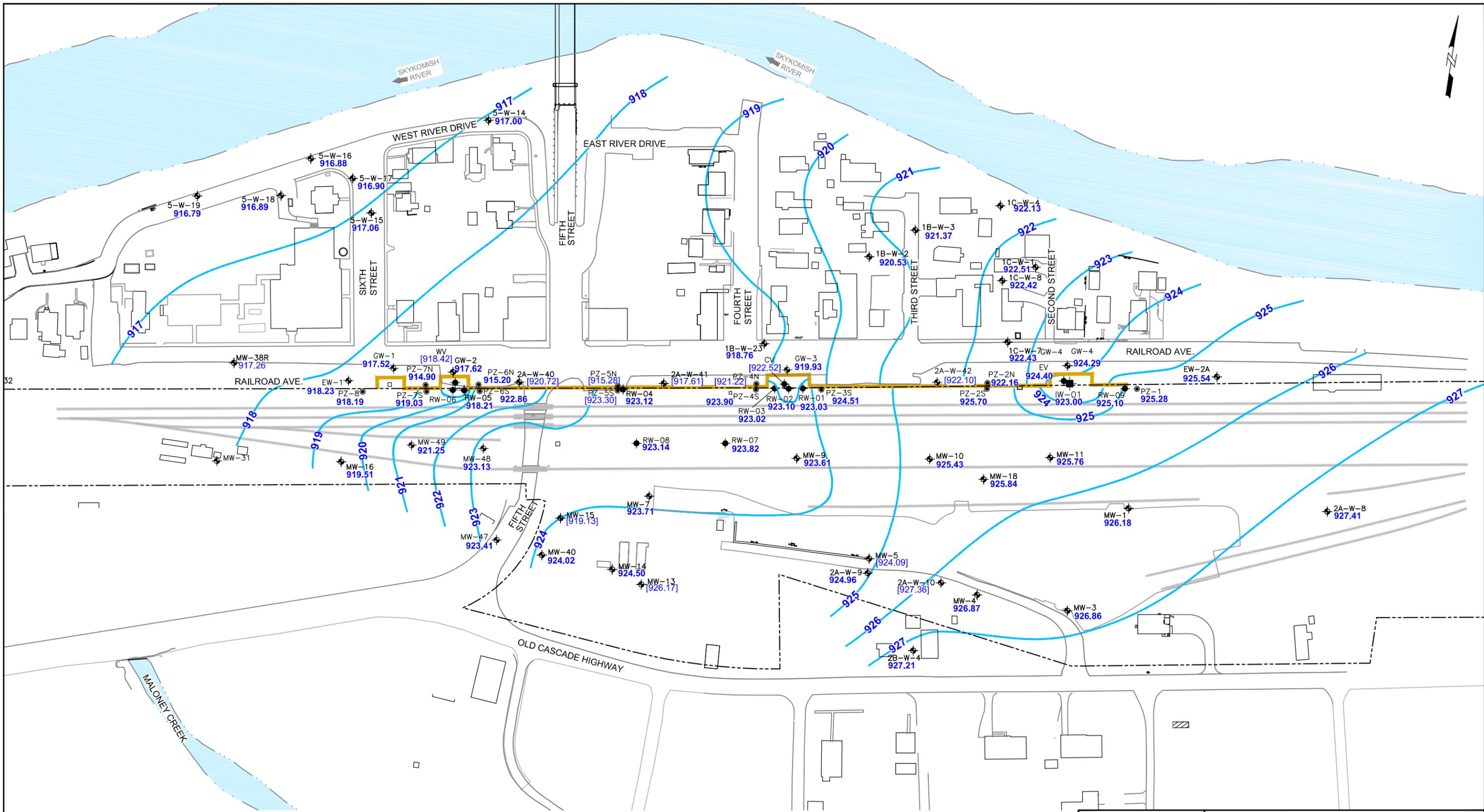
LEGEND

- 927.23 GROUNDWATER ELEVATION (SEPTEMBER 16, 2013)
- [917.19] GROUNDWATER ELEVATION NOT CONSIDERED FOR CONTOURING PURPOSES
- 928— APPROXIMATE GROUNDWATER ELEVATION CONTOUR
- BNSF PROPERTY LINE

NOTE:
 SOME OF THE MEASURED HEAD VALUES IN CLOSE PROXIMITY TO THE BARRIER WALL MAY EXHIBIT SOME VARIABILITY/SLIGHT INCONSISTENCY WITH THE INTERPRETED CONTOURS. THIS COULD BE ATTRIBUTED TO VARIABILITY OF MEASUREMENT PRACTICE WITH RESPECT TO VAULT LIDS.



FIGURE 4
 SEPTEMBER 2013
 GROUNDWATER ELEVATION CONTOUR MAP
 BNSF FORMER MAINTENANCE AND FUELING FACILITY
 SKYKOMISH, WASHINGTON
 FARALLON PN: 683-043



- 2A-W-41 ◆ MONITORING WELL
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FMW ● VAULT WELL

LEGEND

- 926.48 GROUNDWATER ELEVATION (DECEMBER 12 AND 13, 2013)
- [919.03] GROUNDWATER ELEVATION NOT CONSIDERED FOR CONTOURING PURPOSES
- 928— APPROXIMATE GROUNDWATER ELEVATION CONTOUR
- BNSF PROPERTY LINE

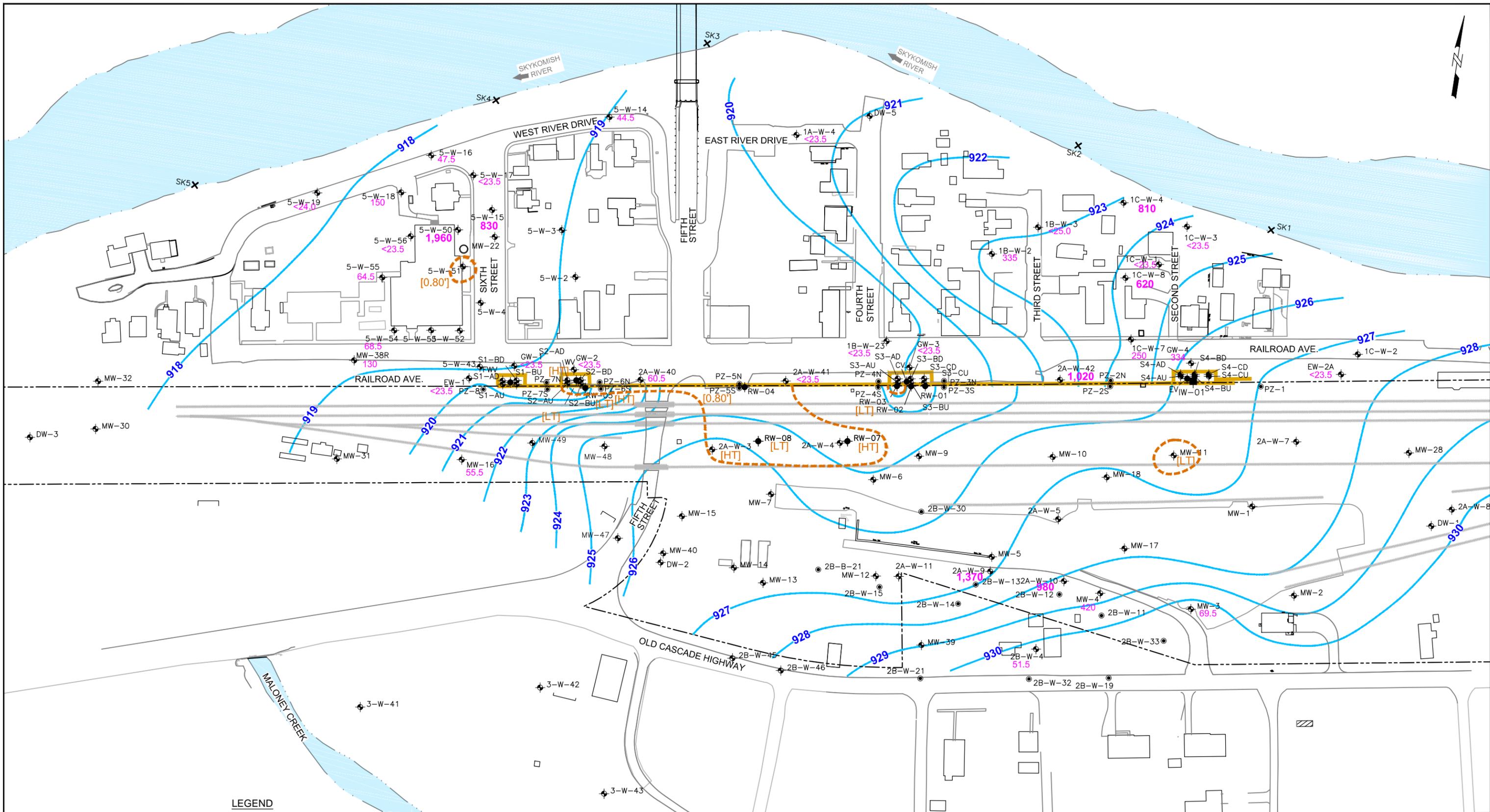
NOTE:
 SOME OF THE MEASURED HEAD VALUES IN CLOSE PROXIMITY TO THE BARRIER WALL MAY EXHIBIT SOME VARIABILITY/SLIGHT INCONSISTENCY WITH THE INTERPRETED CONTOURS. THIS COULD BE ATTRIBUTED TO VARIABILITY OF MEASUREMENT PRACTICE WITH RESPECT TO VAULT LIDS.



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FIGURE 5
 DECEMBER 2013
 GROUNDWATER ELEVATION CONTOUR MAP
 BNSF FORMER MAINTENANCE AND
 FUELING FACILITY
 SKYKOMISH, WASHINGTON

FARALLON PN: 683-043



LEGEND

- 2A-W-41 ◆ MONITORING WELL
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FMW ● VAULT WELL
- SK4 ✕ SKYKOMISH RIVER GAUGE STATIONS
- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM BARRIER WALL
- - - BNSF PROPERTY LINE

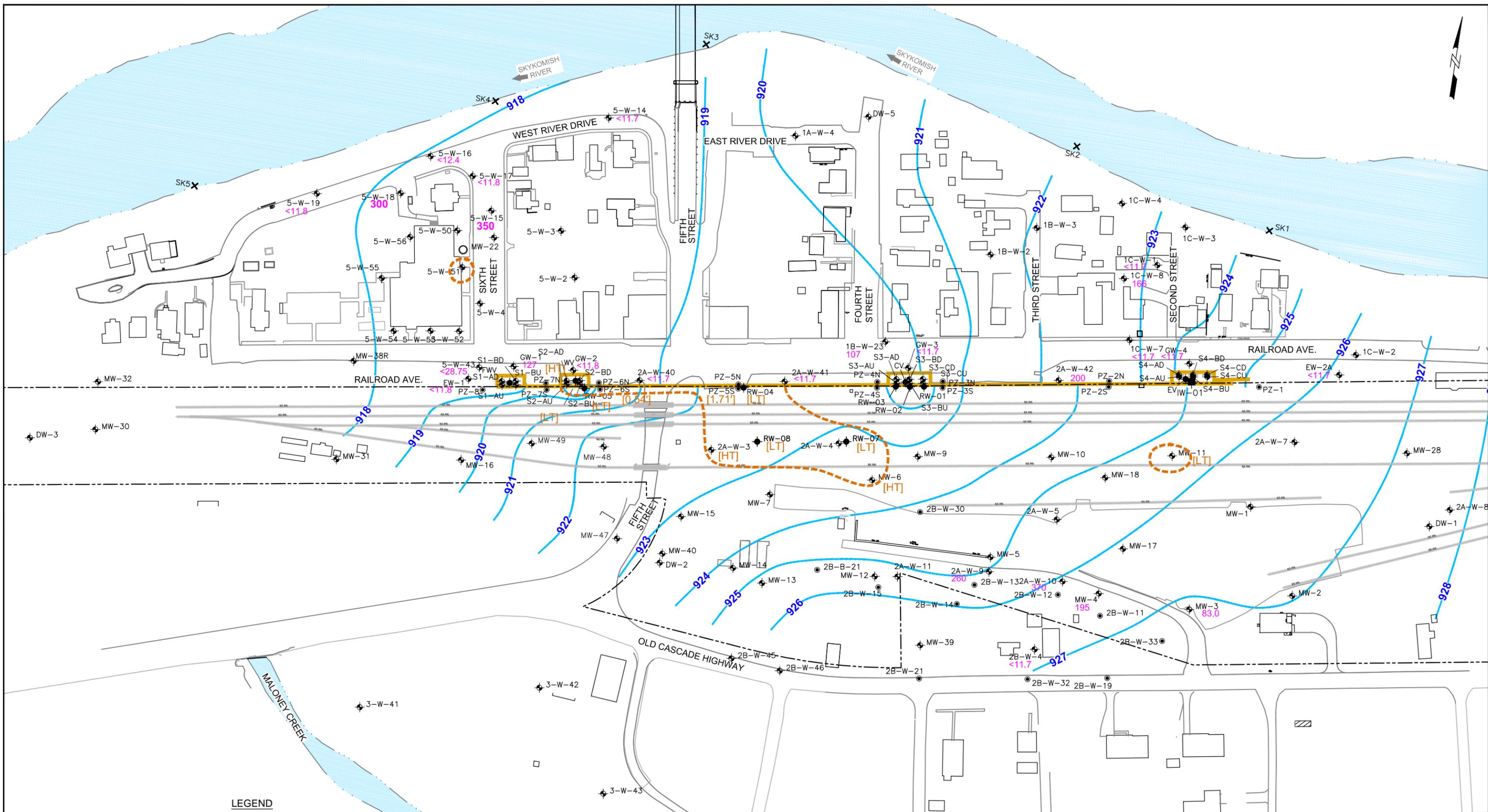
- 50.5 TOTAL PETROLEUM HYDROCARBONS IN MICROGRAMS PER LITER CALCULATED BY SUMMING THE ANALYTICAL RESULTS FOR THE DIESEL-RANGE AND OIL-RANGE FRACTIONS. IF EITHER THE DIESEL OR OIL-RANGE FRACTIONS WERE NOT DETECTED THEN HALF THE ANALYTICAL METHOD DETECTION LIMIT WAS USED IN THE CALCULATION. IF BOTH FRACTIONS WERE NOT DETECTED, THEN HALF THE ANALYTICAL METHOD DETECTION LIMITS WERE ADDED TO REPRESENT THE CALCULATED TOTAL PETROLEUM HYDROCARBONS CONCENTRATION PREFIXED BY THE "<" SYMBOL.
- BOLD** INDICATES THAT THE TOTAL PETROLEUM HYDROCARBONS CONCENTRATION EXCEEDS THE 208 MICROGRAMS PER LITER CLEANUP LEVEL IN LEVEE ZONE MONITORING WELLS OR THE 477 MICROGRAMS PER LITER REMEDIATION LEVEL IN OTHER MONITORING WELLS.
- ESTIMATED EXTENT OF LNAPL AS INDICATED BY LIGHT TRACE (LT), HEAVY TRACE (HT), OR PRODUCT THICKNESS ON GROUNDWATER DURING THE MONITORING EVENT.
- [HT] HEAVY TRACE. NO MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET
- [LT] LIGHT TRACE. NO MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET
- [1.15] MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET



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FIGURE 6
MARCH 2013
TOTAL PETROLEUM HYDROCARBONS
IN GROUNDWATER
BNSF FORMER MAINTENANCE
AND FUELING FACILITY
SKYKOMISH, WASHINGTON
FARALLON PN: 683-043

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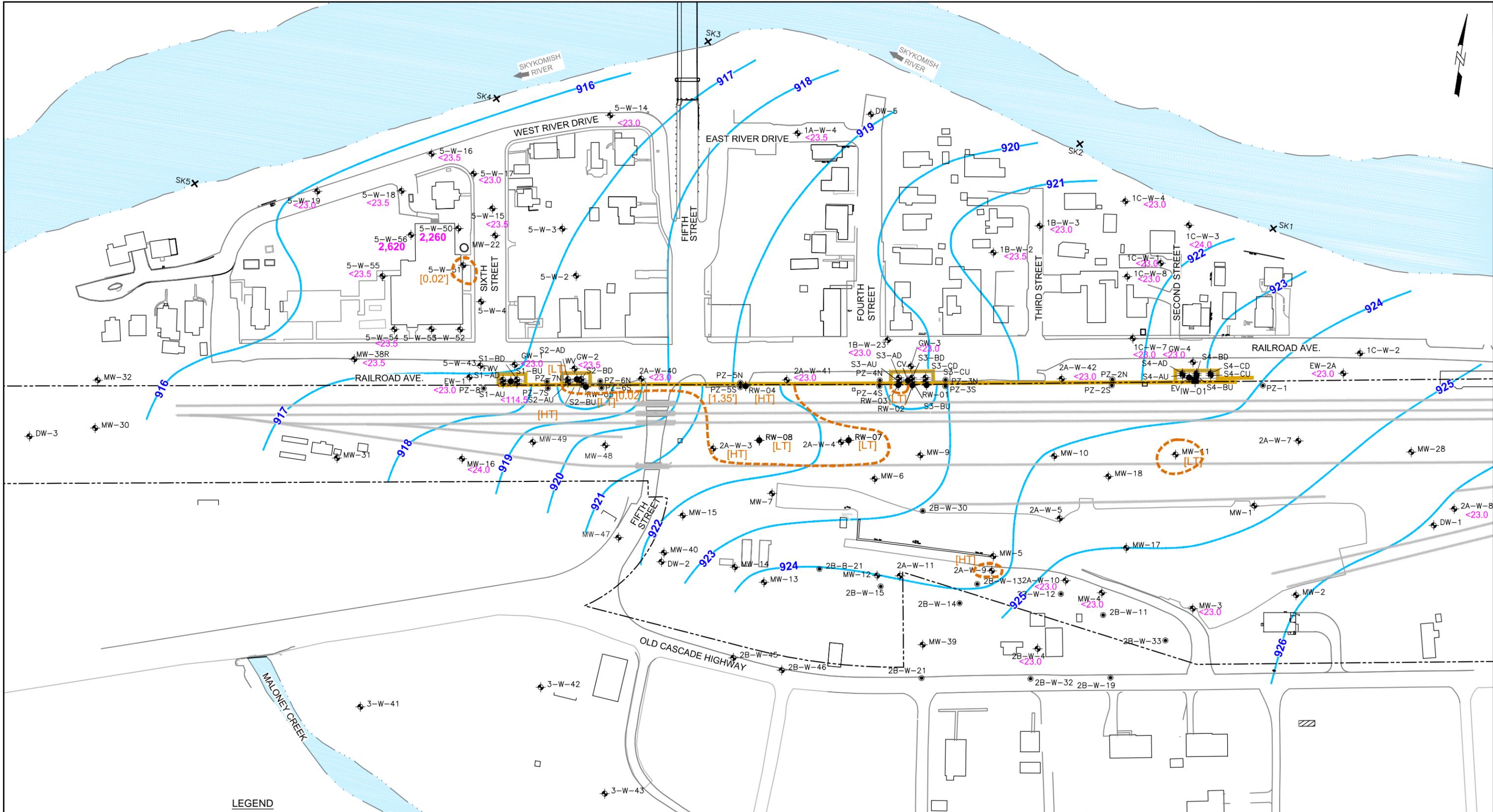
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- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FMW ● VAULT WELL
- SK4 ✕ SKYKOMISH RIVER GAUGE STATIONS
- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM BARRIER WALL
- - - BNSF PROPERTY LINE

- 50.5 TOTAL PETROLEUM HYDROCARBONS IN MICROGRAMS PER LITER CALCULATED BY SUMMING THE ANALYTICAL RESULTS FOR THE DIESEL-RANGE AND OIL-RANGE FRACTIONS. IF EITHER THE DIESEL OR OIL-RANGE FRACTIONS WERE NOT DETECTED THEN HALF THE ANALYTICAL METHOD DETECTION LIMIT WAS USED IN THE CALCULATION. IF BOTH FRACTIONS WERE NOT DETECTED, THEN HALF THE ANALYTICAL METHOD DETECTION LIMITS WERE ADDED TO REPRESENT THE CALCULATED TOTAL PETROLEUM HYDROCARBONS CONCENTRATION PREFIXED BY THE "<" SYMBOL.
- BOLD** INDICATES THAT THE TOTAL PETROLEUM HYDROCARBONS CONCENTRATION EXCEEDS THE 208 MICROGRAMS PER LITER CLEANUP LEVEL IN LEVEE ZONE MONITORING WELLS OR THE 477 MICROGRAMS PER LITER REMEDIATION LEVEL IN OTHER MONITORING WELLS.
- ESTIMATED EXTENT OF LNAPL AS INDICATED BY LIGHT TRACE (LT), HEAVY TRACE (HT), OR PRODUCT THICKNESS ON GROUNDWATER DURING THE MONITORING EVENT.
- [HT] HEAVY TRACE. NO MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET
- [LT] LIGHT TRACE. NO MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET
- [1.15'] MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET



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FIGURE 7
JUNE 2013
TOTAL PETROLEUM HYDROCARBONS
IN GROUNDWATER
BNSF FORMER MAINTENANCE
AND FUELING FACILITY
SKYKOMISH, WASHINGTON
FARALLON PN: 683-043



LEGEND

- 2A-W-41 ◆ MONITORING WELL
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FMW ● VAULT WELL
- SK4 ✕ SKYKOMISH RIVER GAUGE STATIONS
- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM BARRIER WALL
- - - BNSF PROPERTY LINE

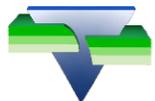
50.5 TOTAL PETROLEUM HYDROCARBONS IN MICROGRAMS PER LITER CALCULATED BY SUMMING THE ANALYTICAL RESULTS FOR THE DIESEL-RANGE AND OIL-RANGE FRACTIONS. IF EITHER THE DIESEL OR OIL-RANGE FRACTIONS WERE NOT DETECTED THEN HALF THE ANALYTICAL METHOD DETECTION LIMIT WAS USED IN THE CALCULATION. IF BOTH FRACTIONS WERE NOT DETECTED, THEN HALF THE ANALYTICAL METHOD DETECTION LIMITS WERE ADDED TO REPRESENT THE CALCULATED TOTAL PETROLEUM HYDROCARBONS CONCENTRATION PREFIXED BY THE "<math>< </math>" SYMBOL. **BOLD** INDICATES THAT THE TOTAL PETROLEUM HYDROCARBONS CONCENTRATION EXCEEDS THE 208 MICROGRAMS PER LITER CLEANUP LEVEL IN LEVEE ZONE MONITORING WELLS OR THE 477 MICROGRAMS PER LITER REMEDIATION LEVEL IN OTHER MONITORING WELLS.

○ ESTIMATED EXTENT OF LNAPL AS INDICATED BY LIGHT TRACE (LT), HEAVY TRACE (HT), OR PRODUCT THICKNESS ON GROUNDWATER DURING THE MONITORING EVENT.

[HT] HEAVY TRACE. NO MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET

[LT] LIGHT TRACE. NO MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET

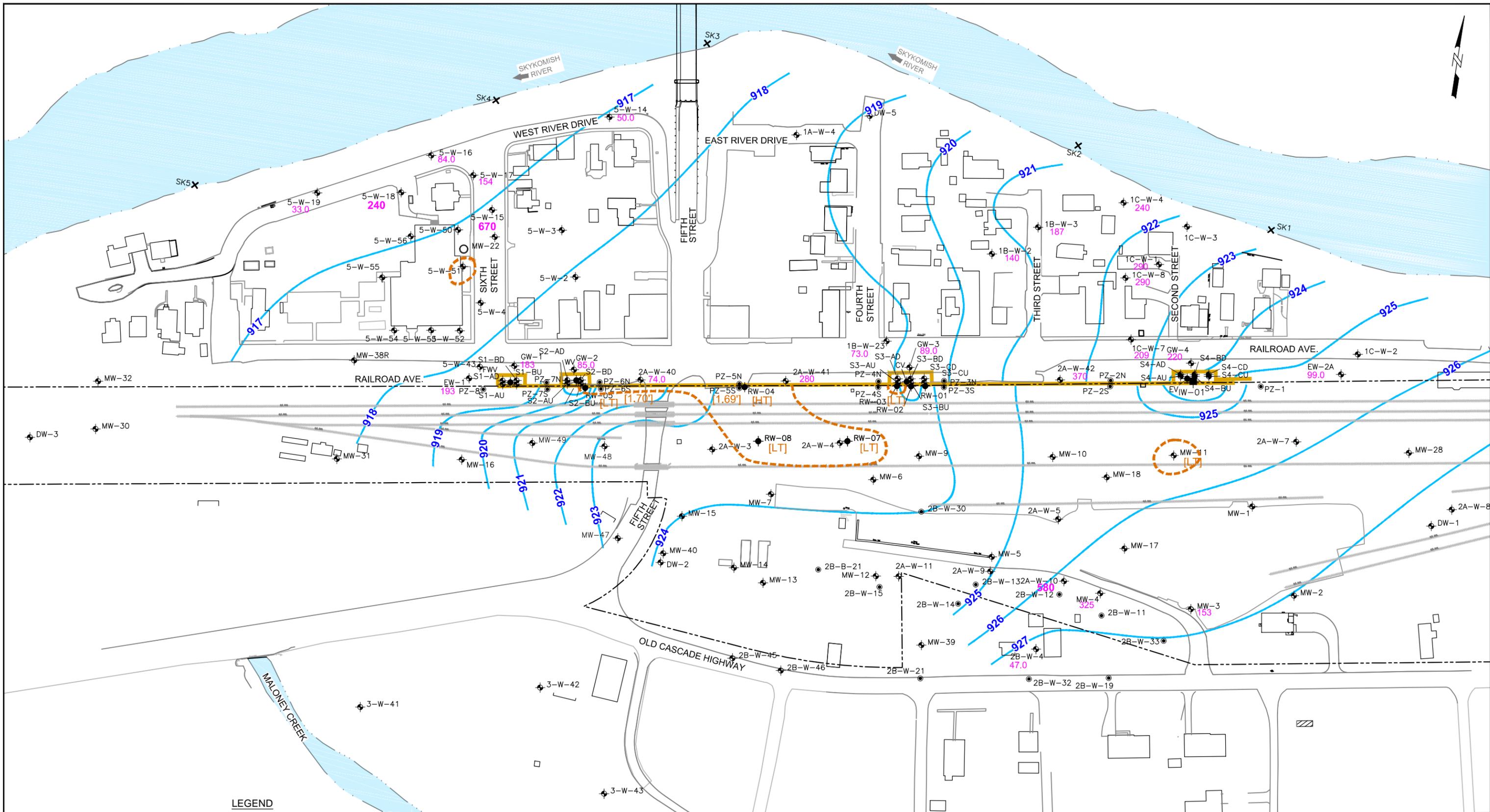
[1.15'] MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET

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 Issaquah, WA 98027

FIGURE 8
 SEPTEMBER 2013
 TOTAL PETROLEUM HYDROCARBONS
 IN GROUNDWATER
 BNSF FORMER MAINTENANCE
 AND FUELING FACILITY
 SKYKOMISH, WASHINGTON
 FARALLON PN: 683-043

Drawn By: DEW | Checked By: TC | Date: 3/13/14 | Disk Reference: 683043a



LEGEND

- 2A-W-41 ◆ MONITORING WELL
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FMW ● VAULT WELL
- SK4 ✕ SKYKOMISH RIVER GAUGE STATIONS
- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM BARRIER WALL
- - - BNSF PROPERTY LINE

- 50.5 TOTAL PETROLEUM HYDROCARBONS IN MICROGRAMS PER LITER CALCULATED BY SUMMING THE ANALYTICAL RESULTS FOR THE DIESEL-RANGE AND OIL-RANGE FRACTIONS. IF EITHER THE DIESEL OR OIL-RANGE FRACTIONS WERE NOT DETECTED THEN HALF THE ANALYTICAL METHOD DETECTION LIMIT WAS USED IN THE CALCULATION. IF BOTH FRACTIONS WERE NOT DETECTED, THEN HALF THE ANALYTICAL METHOD DETECTION LIMITS WERE ADDED TO REPRESENT THE CALCULATED TOTAL PETROLEUM HYDROCARBONS CONCENTRATION PREFIXED BY THE "c" SYMBOL.
- BOLD** INDICATES THAT THE TOTAL PETROLEUM HYDROCARBONS CONCENTRATION EXCEEDS THE 208 MICROGRAMS PER LITER CLEANUP LEVEL IN LEVEE ZONE MONITORING WELLS OR THE 477 MICROGRAMS PER LITER REMEDIATION LEVEL IN OTHER MONITORING WELLS.
- ESTIMATED EXTENT OF LNAPL AS INDICATED BY LIGHT TRACE (LT), HEAVY TRACE (HT), OR PRODUCT THICKNESS ON GROUNDWATER DURING THE MONITORING EVENT.
- [HT] HEAVY TRACE. NO MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET
- [LT] LIGHT TRACE. NO MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET
- [1.15'] MEASURABLE PRODUCT THICKNESS GREATER THAN 0.01 FEET




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975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 9
DECEMBER 2013
TOTAL PETROLEUM HYDROCARBONS
IN GROUNDWATER
BNSF FORMER MAINTENANCE
AND FUELING FACILITY
SKYKOMISH, WASHINGTON
FARALLON PN: 683-043

Drawn By: DEW	Checked By: TC	Date: 3/13/14	Disk Reference: 683043a
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TABLES

**2013 SITE-WIDE
GROUNDWATER MONITORING REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA**

Farallon PN: 683-043

Table 1
Modifications to the Groundwater Monitoring Network
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Activity	Date	Location Identification	Location Type	Location Monitoring Function	Rationale for Abandoned, Destroyed, Deferred, Canceled, or Not Installed Locations	Reference for Planned Activity	Reference for Completed Activity
Not Located	2013	5-W-43	Monitoring Well	Down-gradient of the HCC system	Well could not be located due to grading activities undertaken in this area.	Continue efforts to locate.	—

NOTES:

— = not applicable

Table 2
Groundwater Monitoring Event Dates
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Event	Start Date	End Date
Air Sparge System Monthly Groundwater Sampling Event	01/29/2013	01/29/2013
Air Sparge System Monthly Groundwater Sampling Event	02/21/2013	02/21/2013
Semiannual Fluid Gauging Event	03/18/2013	03/18/2013
Semiannual Groundwater Sampling Event	03/19/2013	03/20/2013
Air Sparge System Monthly Groundwater Sampling Event	04/29/2013	04/29/2013
Air Sparge System Monthly Groundwater Sampling Event and Supplementary Fluid Level Gauging Event	05/21/2013	05/21/2013
Quarterly Fluid Gauging Event	06/17/2013	06/17/2013
Quarterly Groundwater Sampling Event	06/18/2013	06/19/2013
Air Sparge System Monthly Groundwater Sampling Event	07/31/2013	07/31/2013
Air Sparge System Monthly Groundwater Sampling Event	08/26/2013	08/26/2013
Semiannual Fluid Gauging Event	09/16/2013	09/16/2013
Semiannual Groundwater Sampling Event	09/16/2013	09/18/2013
Air Sparge System Monthly and Compliance Groundwater Sampling Event	10/23/2013	10/23/2013
Air Sparge System Monthly and Compliance Groundwater Sampling Event	11/19/2013	11/19/2013
Quarterly Fluid Gauging Event	12/12/2013	12/13/2013
Quarterly Groundwater Sampling Event	12/12/2013	12/14/2013

NOTES:

Sampling details for each monitoring event are included in Table 3.

Table 3
Groundwater Sampling Event Details
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Zone	Location Identification	Groundwater Sampling Events			Analyte
		Monthly	Quarterly	Semiannually	
Air Sparging System	1C-W-1	X	X	X	NWTPH-Dx
	1C-W-7	X	X	X	NWTPH-Dx
	1C-W-8	X	X	X	NWTPH-Dx
Down-gradient of the HCC	1B-W-23	—	X	X	NWTPH-Dx
	2A-W-40	—	X	X	NWTPH-Dx
	2A-W-41	—	X	X	NWTPH-Dx
	2A-W-42	—	X	X	NWTPH-Dx
FMCZ-EW and Surrounding Areas	2A-W-10	—	X	X	NWTPH-Dx
	2A-W-9	—	X	X	NWTPH-Dx
	2B-W-4	—	X	X	NWTPH-Dx
	MW-3	—	X	X	NWTPH-Dx
	MW-4	—	X	X	NWTPH-Dx
HCC System	EW-1	—	X	X	NWTPH-Dx
	EW-2A	—	X	X	NWTPH-Dx
	GW-1	—	X	X	NWTPH-Dx
	GW-2	—	X	X	NWTPH-Dx
	GW-3	—	X	X	NWTPH-Dx
	GW-4	—	X	X	NWTPH-Dx
	S1-AD	—	—	X	NWTPH-Dx
	S1-AU	—	—	X	NWTPH-Dx
	S1-BD	—	—	X	NWTPH-Dx
	S1-BU	—	—	X	NWTPH-Dx
	S2-AD	—	—	X	NWTPH-Dx
	S2-AU	—	—	X	NWTPH-Dx
	S2-BD	—	—	X	NWTPH-Dx
	S2-BU	—	—	X	NWTPH-Dx
	S3-AD	—	—	X	NWTPH-Dx
	S3-AU	—	—	X	NWTPH-Dx
	S3-BD	—	—	X	NWTPH-Dx
	S3-BU	—	—	X	NWTPH-Dx
	S3-CD	—	—	X	NWTPH-Dx
	S3-CU	—	—	X	NWTPH-Dx
	S4-AD	—	—	X	NWTPH-Dx
	S4-AU	—	—	X	NWTPH-Dx
	S4-BD	—	—	X	NWTPH-Dx
S4-BU	—	—	X	NWTPH-Dx	
S4-CD	—	—	X	NWTPH-Dx	
S4-CU	—	—	X	NWTPH-Dx	
Levee	5-W-14	—	X	X	NWTPH-Dx
	5-W-15	—	X	X	NWTPH-Dx
	5-W-16	—	X	X	NWTPH-Dx
	5-W-17	—	X	X	NWTPH-Dx
	5-W-18	—	X	X	NWTPH-Dx
	5-W-19	—	X	X	NWTPH-Dx

Table 3
Groundwater Sampling Event Details
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Zone	Location Identification	Groundwater Sampling Events			Analyte
		Monthly	Quarterly	Semiannually	
Schoolyard	5-W-50	—	—	X	NWTPH-Dx
	5-W-51	—	—	X	NWTPH-Dx
	5-W-54	—	—	X	NWTPH-Dx
	5-W-55	—	—	X	NWTPH-Dx
	5-W-56	—	—	X	NWTPH-Dx
Site-Wide	1A-W-4	—	—	X	NWTPH-Dx
	1B-W-2	—	—	X	NWTPH-Dx
	1B-W-3	—	—	X	NWTPH-Dx
	1C-W-3	—	—	X	NWTPH-Dx
	1C-W-4	—	—	X	NWTPH-Dx
	MW-16	—	—	X	NWTPH-Dx
	MW-38R	—	—	X	NWTPH-Dx

NOTES:

FMCZ - EW = Former Maloney Creek Zone - East Wetland

HCC = Hydraulic Control and Containment

NWTPH-Dx = total petroleum hydrocarbons as diesel-range and as oil-range organics by Northwest Method NWTPH-Dx

Table 4
Fluid Gauging Events Summary
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Zone	Location Identification	Gauging Monitoring Frequency				
		Continuous ¹	Weekly	Monthly	Quarterly	Semiannually
Air Sparging System	1C-W-1	—	—	X	X	X
	1C-W-7	—	—	X	X	X
	1C-W-8	—	—	X	X	X
Down-gradient of the HCC System ¹	1B-W-23	—	—	—	X	X
	2A-W-40	—	—	—	X	X
	2A-W-41	—	—	—	X	X
	2A-W-42	—	—	—	X	X
FMCZ-EW and Surrounding Areas	2A-W-10	—	—	—	X	X
	2A-W-3	—	—	—	X	X
	2A-W-5	—	—	—	X	X
	2A-W-7	—	—	—	X	X
	2A-W-9	—	—	—	X	X
	2B-W-4	—	—	—	X	X
	MW-1	—	—	—	X	X
	MW-11	—	—	—	X	X
	MW-13	—	—	—	X	X
	MW-14	—	—	—	X	X
	MW-15	—	—	—	X	X
	MW-18	—	—	—	X	X
	MW-2	—	—	—	X	X
	MW-3	—	—	—	X	X
	MW-4	—	—	—	X	X
	MW-40	—	—	—	X	X
	MW-5	—	—	—	X	X
	MW-7	—	—	—	X	X
MW-9	—	—	—	X	X	
MW-10	—	—	—	X	X	
HCC System	CV	X	X	—	X	X
	EV	X	X	—	X	X
	WV	X	X	—	X	X
	FWV	X	X	—	X	X
	EW-1	—	—	—	X	X
	EW-2A	—	—	—	X	X
	GW-1	X	X	—	X	X
	GW-2	X	X	—	X	X
	GW-3	X	X	—	X	X
	GW-4	X	X	—	X	X
	IW-01	—	—	—	—	X
	PW-04	—	—	—	—	—
	PZ-1	X	—	—	X	X
	PZ-2N	X	—	—	X	X
	PZ-2S	X	—	—	X	X
	PZ-3N	X	—	—	X	X
PZ-3S	X	—	—	X	X	

Table 4
Fluid Gauging Events Summary
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Zone	Location Identification	Gauging Monitoring Frequency				
		Continuous ¹	Weekly	Monthly	Quarterly	Semiannually
HCC System (continued)	PZ-4N	X	—	—	X	X
	PZ-4S	X	—	—	X	X
	PZ-5N	X	—	—	X	X
	PZ-5S	X	—	—	X	X
	PZ-6N	X	—	—	X	X
	PZ-6S	X	—	—	X	X
	PZ-7N	X	—	—	X	X
	PZ-7S	X	—	—	X	X
	PZ-8	X	—	—	X	X
	RW-01	X	—	—	X	X
	RW-02	X	—	—	X	X
	RW-03	X	—	—	X	X
	RW-04	X	—	—	X	X
	RW-05	X	—	—	X	X
	RW-06	X	—	—	X	X
	RW-07	X	—	—	X	X
	RW-08	X	—	—	X	X
	RW-09	X	—	—	X	X
	S1-AD	—	—	—	—	—
	S1-AU	—	—	—	—	—
	S1-BD	—	—	—	—	—
	S1-BU	—	—	—	—	—
	S2-AD	—	—	—	—	—
	S2-AU	—	—	—	—	—
	S2-BD	—	—	—	—	—
	S2-BU	—	—	—	—	—
	S3-AD	—	—	—	—	—
	S3-AU	—	—	—	—	—
	S3-BD	—	—	—	—	—
	S3-BU	—	—	—	—	—
	S3-CD	—	—	—	—	—
	S3-CU	—	—	—	—	—
	S4-AD	—	—	—	—	—
	S4-AU	—	—	—	—	—
S4-BD	—	—	—	—	—	
S4-BU	—	—	—	—	—	
S4-CD	—	—	—	—	—	
S4-CU	—	—	—	—	—	

Table 4
Fluid Gauging Events Summary
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Zone	Location Identification	Gauging Monitoring Frequency				
		Continuous ¹	Weekly	Monthly	Quarterly	Semiannually
Levee	5-W-14	—	—	—	X	X
	5-W-15	—	—	—	X	X
	5-W-16	—	—	—	X	X
	5-W-17	—	—	—	X	X
	5-W-18	—	—	—	X	X
	5-W-19	—	—	—	X	X
Schoolyard	5-W-50	—	—	—	—	X
	5-W-51	—	—	—	—	X
	5-W-54	—	—	—	—	X
	5-W-55	—	—	—	—	X
	5-W-56	—	—	—	—	X
Site-Wide	1A-W-4	—	—	—	X	X
	1B-W-2	—	—	—	—	X
	1B-W-3	—	—	—	—	X
	1C-W-3	—	—	—	—	X
	1C-W-4	—	—	—	—	X
	2A-W-8	—	—	—	X	X
	MW-16	—	—	—	X	X
	MW-32	—	—	—	—	X
	MW-38R	—	—	—	X	X
	MW-47 ²	—	—	—	X	X
	MW-48 ²	—	—	—	X	X
MW-49 ²	—	—	—	X	X	

NOTES:

¹ Water level transducers have been used to collect continuous water level measurements at these locations. Water levels are recorded daily.

² Wells installed during August 2012.

FMCZ - EW = Former Maloney Creek Zone - East Wetland
HCC = Hydraulic Control and Containment

Table 5
Groundwater Elevations and Product Thickness
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Top of Casing Elevation (feet NAVD88) ¹	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet, NAVD88) ¹	LNAPL Thickness (feet)
Air Sparging System Monitoring Wells					
1C-W-1	936.44	03/18/2013	12.46	923.98	—
		06/17/2013	13.37	923.07	—
		09/16/2013	14.51	921.93	—
		12/13/2013	13.93	922.51	—
1C-W-7	935.04	03/18/2013	10.99	924.05	—
		06/17/2013	12.21	922.83	—
		09/16/2013	13.21	921.83	—
		12/13/2013	12.61	922.43	—
1C-W-8	935.70	03/18/2013	11.68	924.02	—
		06/17/2013	12.95	922.75	—
		09/16/2013	13.99	921.71	—
		12/13/2013	13.28	922.42	—
Former Maloney Creek Zone - East Wetland and Surrounding Area Monitoring Wells					
2A-W-10	937.93	03/18/2013	9.84	928.09	—
		06/17/2013	11.92	926.01	—
	938.85	09/16/2013	13.16	925.69	—
		12/13/2013	11.49	927.36	—
2A-W-3	934.43	03/18/2013	8.31	926.12	Heavy Trace
		06/17/2013	11.58	922.85	Heavy Trace
		09/16/2013	12.67	921.76	Heavy Trace
2A-W-5	939.47	03/18/2013	11.63	927.84	—
		06/17/2013	13.92	925.55	—
		09/16/2013	15.10	924.37	—
2A-W-7	937.76	03/18/2013	10.83	926.93	—
		06/17/2013	11.40	926.36	—
2A-W-9	936.58	03/18/2013	9.61	926.97	—
		06/17/2013	13.64	922.94	—
		09/16/2013	12.78	923.80	Heavy Trace
		12/13/2013	11.62	924.96	—
2B-W-4	931.03	03/18/2013	0.61	930.42	—
		06/17/2013	4.36	926.97	—
		09/16/2013	5.79	925.54	—
		12/13/2013	4.12	927.21	—
MW-1	939.20	03/18/2013	12.67	926.53	—
		06/17/2013	12.54	926.66	—
		09/16/2013	14.29	924.91	—
		12/13/2013	13.02	926.18	—
MW-10	938.34	03/18/2013	11.40	926.94	—
		06/17/2013	13.01	925.33	—
		09/16/2013	14.30	924.04	—
		12/13/2013	12.91	925.43	—
MW-11	939.20	03/18/2013	11.59	927.61	Light Trace
		06/17/2013	13.37	925.83	Light Trace
		09/16/2013	14.75	924.45	Light Trace
		12/13/2013	13.44	925.76	Light Trace

Table 5
Groundwater Elevations and Product Thickness
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Top of Casing Elevation (feet NAVD88) ¹	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet, NAVD88) ¹	LNAPL Thickness (feet)
MW-13	936.49	03/18/2013	9.58	926.91	—
		06/17/2013	10.70	925.79	—
		09/16/2013	11.60	924.89	—
		12/13/2013	10.32	926.17	—
MW-14	936.80	03/18/2013	9.89	926.91	—
		06/17/2013	12.70	924.10	—
		09/16/2013	13.51	923.29	—
		12/13/2013	12.30	924.50	—
MW-15	933.32	03/18/2013	12.02	921.30	—
		06/17/2013	14.62	918.70	—
		09/16/2013	15.73	917.59	—
		12/13/2013	14.19	919.13	—
MW-18	940.68	03/18/2013	12.57	928.11	—
		06/17/2013	14.86	925.82	—
		09/16/2013	16.29	924.39	—
		12/13/2013	14.84	925.84	—
MW-2	939.20	03/18/2013	10.52	928.68	—
		06/17/2013	12.20	927.00	—
MW-3	938.03	03/18/2013	7.76	930.27	—
		06/17/2013	10.90	927.13	—
		09/16/2013	12.68	925.35	—
		12/13/2013	11.17	926.86	—
MW-4	936.95	03/18/2013	8.34	928.61	—
		06/17/2013	10.44	926.51	—
		09/16/2013	11.84	925.11	—
		12/13/2013	10.08	926.87	—
MW-40	936.95	03/18/2013	10.41	926.54	—
		06/17/2013	13.40	923.55	—
		09/16/2013	14.48	922.47	—
		12/13/2013	12.93	924.02	—
MW-5	933.36	03/18/2013	7.35	926.01	—
		06/17/2013	8.65	924.71	—
		09/16/2013	9.59	923.77	—
		12/13/2013	9.27	924.09	—
MW-7	936.89	03/18/2013	10.66	926.23	—
		06/17/2013	13.72	923.17	—
		09/16/2013	14.61	922.28	—
		12/13/2013	13.18	923.71	—
MW-9	937.53	03/18/2013	12.45	925.08	—
		06/17/2013	14.37	923.16	—
		09/16/2013	15.31	922.22	—
		12/13/2013	13.92	923.61	—

Table 5
Groundwater Elevations and Product Thickness
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Top of Casing Elevation (feet NAVD88) ¹	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet, NAVD88) ¹	LNAPL Thickness (feet)
Hydraulic Control and Containment System Monitoring Wells					
CV	936.10	03/18/2013	9.70	926.40	—
		06/17/2013	16.73	919.37	—
		09/16/2013	10.13	925.97	—
		12/13/2013	13.58	922.52	—
EV	934.31	03/18/2013	8.43	925.88	—
		06/17/2013	9.61	924.7	—
		12/13/2013	9.91	924.40	—
EW-1	928.72	03/18/2013	9.31	919.41	—
		06/17/2013	10.11	918.61	—
		09/16/2013	13.25	915.47	—
		12/13/2013	10.49	918.23	—
EW-2A	936.20	03/18/2013	8.71	927.49	—
		06/17/2013	10.00	926.20	—
		09/16/2013	11.75	924.45	—
		12/13/2013	10.66	925.54	—
FWV	930.74	03/18/2013	4.80	925.94	—
		06/17/2013	10.05	920.69	—
		09/16/2013	7.00	923.74	—
GW-1	928.24	03/18/2013	9.34	918.90	—
		06/17/2013	9.78	918.46	—
		09/16/2013	11.31	916.93	—
		12/12/2013	10.72	917.52	—
GW-2	930.29	03/18/2013	11.46	918.83	—
		06/17/2013	11.84	918.45	—
		09/16/2013	13.23	917.06	—
		12/12/2013	12.67	917.62	—
GW-3	935.88	03/18/2013	15.76	920.12	—
		06/17/2013	15.89	919.99	—
		09/16/2013	16.03	919.85	—
		12/12/2013	15.95	919.93	—
GW-4	934.68	03/18/2013	8.23	926.45	—
		06/17/2013	10.00	924.68	—
		09/16/2013	11.29	923.39	—
		12/13/2013	10.39	924.29	—
IW-01	933.49	03/18/2013	7.16	926.33	—
		09/16/2013	9.60	923.89	—
		12/12/2013	10.49	923.00	—
PZ-1	935.38	03/18/2013	9.52	925.86	—
		06/17/2013	10.90	924.48	—
		09/16/2013	11.08	924.30	—
		12/13/2013	10.10	925.28	—
PZ-2N	934.35	03/18/2013	10.26	924.09	—
		06/17/2013	13.09	921.26	—
		09/16/2013	12.58	921.77	—
		12/13/2013	12.19	922.16	—

Table 5
Groundwater Elevations and Product Thickness
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Top of Casing Elevation (feet NAVD88) ¹	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet, NAVD88) ¹	LNAPL Thickness (feet)
PZ-2S	934.94	03/18/2013	6.44	928.50	—
		06/17/2013	11.04	923.9	—
		09/16/2013	10.75	924.19	—
		12/13/2013	9.24	925.70	—
PZ-3N	934.41	03/18/2013	14.05	920.36	—
		06/17/2013	15.19	919.22	—
		09/16/2013	14.00	920.41	—
PZ-3S	934.45	03/18/2013	7.28	927.17	—
		06/17/2013	11.70	922.75	—
		09/16/2013	11.45	923.00	—
		12/13/2013	9.94	924.51	—
PZ-4N	935.27	03/18/2013	14.61	920.66	—
		06/17/2013	15.92	919.35	—
		09/16/2013	14.60	920.67	—
		12/13/2013	14.05	921.22	—
PZ-4S	935.31	03/18/2013	8.64	926.67	—
		06/17/2013	13.35	921.96	—
		09/16/2013	12.84	922.47	—
		12/13/2013	11.41	923.90	—
PZ-5N	933.15	03/18/2013	14.28	918.87	—
		06/17/2013	15.90	917.25	—
		09/16/2013	15.55	917.60	—
		12/13/2013	17.87	915.28	—
PZ-5S	933.46	03/18/2013	8.19	926.09	0.85
		06/17/2013	12.33	922.79	1.7
		09/16/2013	13.20	921.57	1.4
		12/13/2013	11.80	923.30	1.7
PZ-6N	931.17	03/18/2013	12.34	918.83	—
		06/17/2013	13.97	917.20	—
		09/16/2013	14.07	917.10	—
		12/13/2013	15.97	915.20	—
PZ-6S	931.41	03/18/2013	5.85	925.56	Heavy Trace
		06/17/2013	9.30	922.63	0.54
		09/16/2013	10.21	921.22	0.02
		12/13/2013	10.20	922.86	1.7
PZ-7N	930.37	03/18/2013	11.38	918.99	—
		06/17/2013	13.25	917.12	—
		09/16/2013	14.69	915.68	—
		12/13/2013	15.47	914.9	—
PZ-7S	930.40	03/18/2013	6.65	923.75	—
		06/17/2013	10.26	920.14	—
		09/16/2013	11.93	918.47	—
		12/13/2013	11.37	919.03	—
PZ-8	929.48	03/18/2013	8.55	920.93	—
		06/17/2013	11.38	918.10	—
		09/16/2013	12.59	916.89	—
		12/13/2013	11.29	918.19	—

Table 5
Groundwater Elevations and Product Thickness
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Top of Casing Elevation (feet NAVD88) ¹	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet, NAVD88) ¹	LNAPL Thickness (feet)
RW-01	932.84	03/18/2013	9.70	923.14	—
		06/17/2013	11.30	921.54	—
		09/16/2013	11.13	921.71	—
		12/13/2013	9.81	923.03	—
RW-02	933.84	03/18/2013	10.68	923.16	—
		06/17/2013	12.20	921.64	—
		09/16/2013	12.12	921.72	—
		12/13/2013	9.82	924.02	—
RW-03	933.80	03/18/2013	13.76	920.04	Light Trace
		06/17/2013	12.16	921.64	—
		09/16/2013	12.08	921.72	Light Trace
		12/13/2013	10.78	923.02	Light Trace
RW-04	931.86	06/17/2013	9.66	922.20	Light Trace
		09/16/2013	12.69	919.17	Heavy Trace
		12/13/2013	8.85	923.01	Heavy Trace
RW-05	928.53	03/18/2013	12.92	915.61	Light Trace
		06/17/2013	10.12	918.41	Light Trace
		09/16/2013	11.36	917.17	Light Trace
		12/13/2013	10.32	918.21	Light Trace
RW-06	928.53	03/18/2013	9.37	919.16	Light Trace
		06/17/2013	10.11	918.42	Light Trace
		09/16/2013	11.35	917.18	Heavy Trace
RW-07	933.06	03/18/2013	9.37	923.69	Heavy Trace
		06/17/2013	9.89	923.17	Light Trace
		09/16/2013	10.80	922.26	Light Trace
		12/13/2013	9.24	923.82	Light Trace
RW-08	931.85	03/18/2013	8.22	923.63	Light Trace
		06/17/2013	9.49	922.36	Light Trace
		09/16/2013	10.57	921.28	Light Trace
		12/13/2013	8.71	923.14	Light Trace
RW-09	933.96	03/18/2013	7.65	926.31	—
		06/17/2013	8.86	925.10	—
		09/16/2013	10.04	923.92	—
		12/13/2013	12.76	921.20	—
Levee Zone Monitoring Wells					
5-W-14	926.59	03/18/2013	8.26	918.33	—
		06/17/2013	8.45	918.14	—
		09/16/2013	10.35	916.24	—
		12/12/2013	9.59	917.00	—
5-W-15	925.15	03/18/2013	6.81	918.34	—
		06/17/2013	7.00	918.15	—
		09/16/2013	8.89	916.26	—
		12/12/2013	8.09	917.06	—
5-W-16	925.20	03/18/2013	7.10	918.10	—
		06/17/2013	7.20	918.00	—
		09/16/2013	9.06	916.14	—
		12/12/2013	8.32	916.88	—

Table 5
Groundwater Elevations and Product Thickness
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Top of Casing Elevation (feet NAVD88)¹	Monitoring Date	Depth to Water (feet)²	Water Level Elevation (feet, NAVD88)¹	LNAPL Thickness (feet)
5-W-17	924.60	03/18/2013	6.45	918.15	—
		06/17/2013	6.58	918.02	—
		09/16/2013	8.44	916.16	—
		12/12/2013	7.70	916.90	—
5-W-18	924.64	03/18/2013	6.51	918.13	—
		06/17/2013	6.63	918.01	—
		09/16/2013	8.50	916.14	—
		12/12/2013	7.75	916.89	—
5-W-19	924.35	03/18/2013	6.41	917.94	—
		06/17/2013	6.44	917.91	—
		09/16/2013	8.28	916.07	—
		12/12/2013	7.56	916.79	—
Monitoring Wells Down-Gradient of the Hydraulic Control and Containment System					
1B-W-23	936.25	03/18/2013	16.43	919.82	—
		06/17/2013	17.36	918.89	—
		09/16/2013	17.28	918.97	—
		12/12/2013	17.49	918.76	—
2A-W-40	933.34	03/18/2013	11.14	922.20	—
		06/17/2013	12.11	921.23	—
		09/16/2013	15.39	917.95	—
		12/12/2013	12.62	920.72	—
2A-W-41	935.22	03/18/2013	16.33	918.89	—
		06/17/2013	16.73	918.49	—
		09/16/2013	18.16	917.06	—
		12/12/2013	17.61	917.61	—
2A-W-42	935.37	03/18/2013	12.89	922.48	—
		06/17/2013	13.08	922.29	—
		09/16/2013	13.74	921.63	—
		12/13/2013	13.27	922.10	—
5-W-50	925.49	03/18/2013	6.39	919.10	—
		09/16/2013	8.68	916.81	—
5-W-51	925.08	03/18/2013	6.60	919.26	0.80
		09/16/2013	8.63	916.47	0.02
5-W-54	924.58	03/18/2013	5.90	918.68	—
		09/16/2013	7.95	916.63	—
5-W-55	923.92	03/18/2013	5.56	918.36	—
		09/16/2013	7.83	916.09	—
5-W-56	930.00	09/16/2013	8.19	921.81	—
Site-Wide Monitoring Wells					
1A-W-4	929.07	03/18/2013	8.20	920.87	—
		06/17/2013	8.78	920.29	—
		09/16/2013	10.40	918.67	—
1B-W-2	935.81	03/18/2013	12.59	923.22	—
		09/16/2013	14.48	921.33	—
		12/12/2013	15.28	920.53	—
1B-W-3	936.66	03/18/2013	13.76	922.90	—
		09/16/2013	15.60	921.06	—
		12/12/2013	15.29	921.37	—

Table 5
Groundwater Elevations and Product Thickness
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Top of Casing Elevation (feet NAVD88) ¹	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet, NAVD88) ¹	LNAPL Thickness (feet)
1C-W-3	933.56	03/18/2013	9.37	924.19	—
		09/16/2013	11.92	921.64	—
1C-W-4	932.74	03/18/2013	9.45	923.29	—
		09/16/2013	11.11	921.63	—
		12/13/2013	10.61	922.13	—
2A-W-8	942.62	03/18/2013	12.76	929.86	—
		06/17/2013	14.79	927.83	—
		09/16/2013	16.48	926.14	—
		12/13/2013	15.21	927.41	—
MW-16	933.32	03/18/2013	12.05	921.27	—
		06/17/2013	13.70	919.62	—
		09/16/2013	14.75	918.57	—
		12/13/2013	13.81	919.51	—
MW-32	926.06	03/18/2013	8.38	917.68	—
		09/16/2013	10.53	915.53	—
MW-38R	922.39	03/18/2013	3.82	918.57	—
		06/17/2013	4.70	917.69	—
		09/16/2013	6.00	916.39	—
		12/12/2013	5.13	917.26	—
MW-47	932.61	03/18/2013	6.71	925.90	—
		06/17/2013	9.66	922.95	—
		09/16/2013	11.04	921.57	—
		12/13/2013	9.20	923.41	—
MW-48	933.90	03/18/2013	8.22	925.68	—
		06/17/2013	11.25	922.65	—
		09/16/2013	12.59	921.31	—
		12/13/2013	10.77	923.13	—
MW-49	933.14	03/18/2013	9.58	923.56	—
		06/17/2013	11.94	921.20	—
		09/16/2013	13.42	919.72	—
		12/13/2013	11.89	921.25	—

NOTES:

— denotes light nonaqueous-phase liquid (LNAPL) was not present

¹ In feet above mean sea level.

² In feet below top of well casing.

Table 6
Stabilized Groundwater Field Parameter Measurements
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Sample Location	Sample Date	Dissolved Oxygen (milligrams per liter)	Oxidation Reduction Potential (millivolts)	pH (Standard pH Units)	Temperature (degrees Celsius)	Turbidity (NTU)	Specific Conductivity (umhos/cm)
Air Sparging System Monitoring Wells							
1C-W-1	01/29/2013	4.81	396	5.86	8.98	2.5	0.07
	02/21/2013	3.27	200	5.96	8.34	2.8	0.084
	03/21/2013	3.5	211	5.77	7.84	0	0.087
	04/29/2013	4.24	172	5.07	12.61	0	0.09
	05/21/2013	3.98	226	5.90	10.43	4.5	0.073
	06/18/2013	2.9	194	5.95	12.52	3.6	0.068
	09/18/2013	3.13	216	5.80	12.59	0	0.084
	12/13/2013	2.69	165	5.90	7.63	25.6	0.094
1C-W-7	01/29/2013	5.44	394	6.13	8.83	1.9	0.088
	02/21/2013	3.91	162	6.05	8.79	9.9	0.093
	03/21/2013	2.01	195	5.73	8.38	0	0.104
	04/29/2013	6.54	193	5.48	13.04	0	0.082
	05/21/2013	2.54	217	6.02	10.58	4.6	0.074
	06/18/2013	1.97	184	6.04	13.24	0.8	0.079
	07/31/2013	1.41	311	5.46	IE	1.8	0.08
	08/26/2013	0.79	109	6.14	16.89	0	0.102
	09/17/2013	0.75	188	5.44	14.75	1.9	0.1
	10/23/2013	0.72	119	5.19	IE	0	0.098
	11/19/2013	4.7	107.9	6.14	9.02	IE	0.131
	12/13/2013	1.75	216.2	6.41	7.6	0.76	0.168
1C-W-8	01/29/2013	5.81	353	5.99	10.27	4.7	0.064
	02/21/2013	2.50	135	6.06	8.72	4.0	0.087
	03/21/2013	3.44	199	5.79	7.86	0.5	0.057
	04/29/2013	5.48	204	5.23	10.07	0	0.074
	05/21/2013	2.9	232	5.96	10.14	6.3	0.078
	06/18/2013	1.95	119	6.02	11.5	2.5	0.083
	07/31/2013	2.05	230	5.30	IE	4.3	0.079
	08/26/2013	1.26	62	6.12	IE	14.8	0.089
	09/18/2013	2.43	145	5.87	12.05	38.1	0.112
	10/23/2013	1.02	107	4.66	IE	0	0.1
	11/19/2013	7.4	140.2	5.91	10.18	1.4	0.102
	12/13/2013	2.15	215.8	6.27	8.51	1.4	0.166

Table 6
Stabilized Groundwater Field Parameter Measurements
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Sample Location	Sample Date	Dissolved Oxygen (milligrams per liter)	Oxidation Reduction Potential (millivolts)	pH (Standard pH Units)	Temperature (degrees Celsius)	Turbidity (NTU)	Specific Conductivity (umhos/cm)
Former Maloney Creek Zone - East Wetland and Surrounding Area Monitoring Wells							
2A-W-10	03/19/2013	4.54	190.4	5.02	3.82	0.92	116
	06/19/2013	0.94	102	5.89	12.56	18	0.086
	09/18/2013	0.05	112	5.47	14.06	7.5	0.172
	12/13/2013	1.04	121.3	5.73	7.64	0	80
2A-W-9	03/19/2013	0.2	1.5	5.29	5.74	0.8	89
	06/19/2013	0.65	36	6.14	13.48	8.9	0.073
2B-W-4	03/19/2013	3.7	181.9	5.13	5.49	IE	62
	06/18/2013	4.09	170.2	6.17	8.85	0.15	0.053
	09/18/2013	9.12	172.5	5.89	12.19	1.34	0.107
	12/12/2013	3.52	220.7	6.02	8.37	0.07	0.101
MW-3	03/19/2013	4.17	245	5.29	8.50	3.0	0.051
	06/19/2013	0.57	161	5.91	10.67	56.7	0.07
	09/18/2013	0.53	78	5.71	16.74	29.9	0.093
	12/13/2013	2.38	159	5.70	9.21	19.6	0.13
MW-4	03/19/2013	3.94	239	5.22	8	0.2	0.078
	06/19/2013	0.82	97	5.83	11.78	6.7	0.076
	09/18/2013	0.6	79	5.50	14.15	2.2	0.109
	12/13/2013	7.54	191	5.10	6.2	0	69

Table 6
Stabilized Groundwater Field Parameter Measurements
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Sample Location	Sample Date	Dissolved Oxygen (milligrams per liter)	Oxidation Reduction Potential (millivolts)	pH (Standard pH Units)	Temperature (degrees Celsius)	Turbidity (NTU)	Specific Conductivity (umhos/cm)
Hydraulic Control and Containment System Monitoring Wells							
EW-1	03/20/2013	1.78	206	5.53	9.34	0	0.096
	06/18/2013	2.12	176.4	6.10	9.73	0.18	0.094
	09/18/2013	0.79	218	5.87	9.17	12.43	0.095
	12/13/2013	0.46	160.1	5.86	8.99	0	112
EW-2A	03/20/2013	5.15	160.7	5.33	5.85	1.77	0.07
	06/18/2013	3.11	235	5.76	11.14	3.2	0.061
	09/18/2013	11.31	262.6	5.64	10.02	1.87	0.069
	12/13/2013	3.16	290	5.76	7.53	0	0.077
GW-1	03/20/2013	1.19	133.4	5.83	5.56	3.12	0.145
	06/18/2013	0.31	145.1	6.60	11.29	0.49	0.134
	09/18/2013	0.44	181.1	6.55	11.56	176.7	0.16
	12/13/2013	0.76	105.7	6.46	9.33	IE	190
GW-2	03/19/2013	1.08	54	5.85	8.05	0.4	0.13
	06/18/2013	1.62	149.8	6.39	10.21	1.06	0.108
	09/18/2013	0.37	142.2	6.21	12.44	56.39	0.149
	12/13/2013	5.17	128.3	6.10	8.49	1.7	187
GW-3	03/20/2013	6	128	6.23	8.95	2.6	0.078
	06/18/2013	1.63	135	6.29	13.18	13.6	0.08
	09/17/2013	1.79	165	5.91	12.31	29.1	0.1
	12/13/2013	2.73	164	6.17	7.2	7.4	108
GW-4	03/20/2013	4.89	164	6.84	7.99	15.6	0.091
	06/18/2013	1.41	156	6.29	10.91	3.5	0.1
	09/17/2013	1.55	214	5.35	12.69	0	0.086
	12/13/2013	10.26	224.9	7.19	4.24	2.22	0.147

Table 6
Stabilized Groundwater Field Parameter Measurements
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Sample Location	Sample Date	Dissolved Oxygen (milligrams per liter)	Oxidation Reduction Potential (millivolts)	pH (Standard pH Units)	Temperature (degrees Celsius)	Turbidity (NTU)	Specific Conductivity (umhos/cm)
Levee Zone Monitoring Wells							
5-W-14	03/19/2013	5.28	131.5	7.21	IE	0.19	0.089
	06/18/2013	3.23	NM	6.54	10.46	0.1	0.089
	09/17/2013	4.06	185	6.25	12.65	0	0.082
	12/14/2013	5.76	179.7	6.42	6.69	IE	92
5-W-15	03/19/2013	1.11	-1.5	IE	IE	33.01	0.198
	06/18/2013	0.22	4.7	7.02	11.11	10.69	0.218
	09/17/2013	2.13	-41	6.69	13.82	3.9	0.225
	12/14/2013	0.67	-49.7	6.93	8.45	20.5	210
5-W-16	03/19/2013	4.28	126.2	6.78	IE	0.23	0.114
	06/18/2013	10.1	158.3	6.93	9.87	1.39	0.059
	09/16/2013	3.64	250	6.30	16.64	0.1	0.094
	12/13/2013	6.1	130.7	6.60	6.53	IE	104
5-W-17	03/19/2013	4.41	132.1	6.91	IE	0.14	0.085
	06/18/2013	8.56	185.8	6.28	8.95	0.01	0.088
	09/17/2013	4.2	204	6.11	11.18	0	0.086
	12/14/2013	5.92	185.8	6.30	6.9	IE	84
5-W-18	03/19/2013	1.59	140.7	6.51	IE	1.95	0.192
	06/18/2013	0.85	168.3	6.79	10.29	0.74	0.142
	09/17/2013	1.98	29	6.33	12.88	6.4	0.188
	12/14/2013	0.76	141.2	6.69	7.39	IE	206
5-W-19	03/19/2013	4.67	197.7	4.40	IE	0.17	0.097
	06/18/2013	11.01	191.5	6.46	9.52	0.4	0.033
	09/16/2013	5	284	6.31	15.75	0	0.076
	12/13/2013	5.33	141.4	6.36	6.31	IE	89

Table 6
Stabilized Groundwater Field Parameter Measurements
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Sample Location	Sample Date	Dissolved Oxygen (milligrams per liter)	Oxidation Reduction Potential (millivolts)	pH (Standard pH Units)	Temperature (degrees Celsius)	Turbidity (NTU)	Specific Conductivity (umhos/cm)
Monitoring Wells Down-Gradient of the Hydraulic Control and Containment System							
1B-W-23	03/20/2013	5.28	195	6.45	7.67	14.3	0.074
	06/18/2013	3.41	187	6.54	16.91	488	0.14
	09/18/2013	8.38	172.2	6.10	15.72	6.54	0.122
	12/13/2013	8.3	179.1	5.77	7.69	0.8	497
2A-W-40	03/19/2013	4.58	240	5.42	8.14	0.9	0.063
	06/19/2013	3.17	186	6.40	12.35	0	0.064
	09/17/2013	4.76	224	6.23	12.63	0	0.062
	12/13/2013	6.64	156.3	6.21	8.91	0	67
2A-W-41	03/20/2013	8.55	87.8	5.73	6.75	2.09	0.08
	06/19/2013	3.85	85	6.22	11.18	1.9	0.077
	09/17/2013	2.87	21	5.97	14.57	13.2	0.078
	12/13/2013	5.29	135	6.10	6.89	6.7	0.103
2A-W-42	03/20/2013	3.95	137.6	5.87	6.62	16.12	184
	06/18/2013	1.24	187	6.17	15.7	3.7	0.113
	09/17/2013	0.82	97	5.90	14.12	1.6	0.53
	12/13/2013	0.91	171.6	5.96	8.08	IE	170
5-W-50	03/19/2013	0.98	92.5	4.66	4.99	6	29
	09/16/2013	1.72	-200	6.10	16.22	11	0.303
5-W-54	03/19/2013	7.48	184.3	7.67	IE	1.56	0.062
	09/17/2013	2.39	196	5.96	13.17	0	0.12
5-W-55	03/19/2013	7.42	177.6	7.23	IE	0.86	0.072
	09/16/2013	1.94	165	5.71	16.06	136	0.145
5-W-56	03/19/2013	8.76	181.8	5.49	5.79	2.17	35
	09/16/2013	2.13	111	5.99	16.15	10.9	0.6

Table 6
Stabilized Groundwater Field Parameter Measurements
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Sample Location	Sample Date	Dissolved Oxygen (milligrams per liter)	Oxidation Reduction Potential (millivolts)	pH (Standard pH Units)	Temperature (degrees Celsius)	Turbidity (NTU)	Specific Conductivity (umhos/cm)
Site-Wide Monitoring Wells							
1A-W-4	03/20/2013	6.94	114.9	IE	IE	0.88	0.082
	09/18/2013	5.32	155.7	6.43	9.44	145.2	0.079
1B-W-2	03/20/2013	6.46	156.8	NM	IE	5.53	0.17
	09/18/2013	0.36	194.2	5.16	12.5	1.61	0.381
	12/13/2013	7.95	119.9	6.07	7.79	34.6	144
1B-W-3	03/20/2013	4.19	92.2	7.36	IE	1.23	0.146
	07/31/2013	1.26	176	5.83	IE	8.3	0.114
	08/26/2013	3.99	33	6.65	IE	29.8	0.134
	09/18/2013	1.7	118	6.36	12.29	20.7	0.155
	10/23/2013	1.58	111	5.00	15.3	0	0.146
	11/19/2013	7.92	95.6	6.51	10.11	2.2	0.159
	12/13/2013	1.37	-163.6	IE	8.94	0.67	0.251
1C-W-3	03/20/2013	4.72	199	6.00	8.36	27.3	0.069
	09/18/2013	3.68	267	5.80	12.7	409	0.084
1C-W-4	03/20/2013	2.58	157	NM	IE	2.09	0.093
	09/18/2013	2.95	241	5.67	11.45	0	0.083
	12/13/2013	2.54	275	5.87	7.48	0.2	0.096
2A-W-8	09/18/2013	2	221	5.19	13.42	29.7	0.113
MW-16	03/19/2013	5.24	219	5.78	7.98	0.4	0.057
	09/18/2013	7.36	262.1	5.70	10.63	5.12	0.088
MW-38R	03/19/2013	1	143.6	7.44	IE	2.45	0.109
	09/17/2013	1.98	208	5.95	13.6	0.4	0.094

NOTES:

IE = instrument error

umhos/cm = micromhos per centimeter

NM = not measured

NTU = nephelometric turbidity units

Table 7
Calculated Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Sample Date	DRO (micrograms per liter) ¹			ORO (micrograms per liter) ¹			Calculated NWTPH-Dx ² (micrograms per liter)
		Result	MDL	MRL	Result	MDL	MRL	
Air Sparging System Monitoring Wells								
1C-W-1	01/29/2013	< 9.81	9.81	50	< 64	64	100	< 36.9
	02/21/2013	120	28	47	< 110	110	110	175
	03/21/2013	< 56	56	56	< 66 J	66	66	< 61
	04/29/2013	58 J	28	47	72 J	19	95	130
	05/21/2013	< 28	28	48	< 76 J	76	76	< 52
	06/18/2013	< 32	32	32	< 45 J	45	45	< 38.5
	09/18/2013	< 76 J	76	76	< 120 J	120	120	< 98
	12/13/2013	110	14	24	180	9.4	48	290
1C-W-7	01/29/2013	< 9.81	9.81	50	< 64	64	100	< 36.9
	02/21/2013	200	28	47	< 130	130	130	265
	03/21/2013	240	28	47	< 200	200	200	340
	04/29/2013	170	28	47	110	19	95	280
	05/21/2013	< 28	28	48	< 110	110	110	< 69
	06/18/2013	< 72	72	72	< 56	56	56	< 64
	07/31/2013	< 81 J	81	81	< 89 J	89	89	< 85
	08/26/2013	83 J	15	130	64 J	10	250	147
	09/17/2013	< 120 J	120	120	< 180 J	180	180	< 150
	10/23/2013	110	14	24	95	9.3	47	205
	11/19/2013	260	14	120	160 J	9.3	240	420
12/13/2013	99	14	24	110	9.3	48	209	
1C-W-8	01/29/2013	< 9.81	9.81	50	489	64	100	493
	02/21/2013	240	28	47	< 160	160	160	320
	03/21/2013	300	28	47	320	19	95	620
	04/29/2013	230	28	47	190	19	95	420
	05/21/2013	160	28	48	160	19	96	320
	06/18/2013	100	14	24	66	9.3	47	166
	07/31/2013	< 46 J	46	46	< 44 J	44	44	< 45
	08/26/2013	63 J	15	130	65 J	10	250	128
	09/18/2013	< 110 J	110	110	< 210 J	210	210	< 160
	10/23/2013	100	14	24	96	9.3	47	196
	11/19/2013	440	14	120	380	9.3	240	820
	12/13/2013	160 J	14	24	130	9.3	48	290

Table 7
Calculated Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Sample Date	DRO (micrograms per liter) ¹			ORO (micrograms per liter) ¹			Calculated NWTPH-Dx ² (micrograms per liter)
		Result	MDL	MRL	Result	MDL	MRL	
Former Maloney Creek Zone - East Wetland and Surrounding Area Monitoring Wells								
2A-W-10	03/19/2013	230	28	47	750	19	95	980
	06/19/2013	180	14	24	190	9.3	47	370
	09/18/2013	< 140 J	140	140	< 200 J	200	200	< 170
	12/13/2013	210	14	24	370	9.3	48	580
2A-W-9	03/19/2013	780	28	47	590	19	95	1,370
	06/19/2013	160	14	24	100	9.3	47	260
2B-W-4	03/19/2013	42 J	28	48	< 82 J	82	82	83
	06/18/2013	< 20 J	20	20	< 26 J	26	26	< 23
	09/18/2013	< 60 J	60	60	< 120 J	120	120	< 90
	12/12/2013	25	14	24	22 J	9.3	48	47
MW-3	03/19/2013	60	28	47	< 100	100	100	110
	06/19/2013	< 56	56	56	76	9.3	47	104
	09/18/2013	< 50 J	50	50	< 61 J	61	61	< 55.5
	12/13/2013	58	14	24	95	9.3	48	153
MW-4	03/19/2013	120	28	47	300	19	95	420
	06/19/2013	85	14	24	110	9.3	47	195
	09/18/2013	< 190 J	190	190	< 150 J	150	150	< 170
	12/13/2013	95	14	24	230	9.3	47	325
Hydraulic Control and Containment System Monitoring Wells								
EW-1	03/20/2013	< 65	65	65	< 140	140	140	< 102
	06/18/2013	< 52	52	52	< 84	84	84	< 68
	09/18/2013	< 94 J	94	94	< 140 J	140	140	< 117
	12/13/2013	73	14	24	120	9.3	48	193
EW-2A	03/20/2013	< 100	100	100	< 210	210	210	< 155
	06/18/2013	< 31	31	31	< 58	58	58	< 44.5
	09/18/2013	< 79 J	79	79	< 150 J	150	150	< 114
	12/13/2013	39	14	24	60	9.3	48	99
GW-1	03/20/2013	< 130	130	130	< 220	220	220	< 175
	06/18/2013	< 70	70	70	120	9.5	49	155
	09/18/2013	< 94 J	94	94	< 110 J	110	110	< 102
	12/13/2013	83	14	24	100	9.3	48	183
GW-2	03/19/2013	< 110	110	110	< 140	140	140	< 125
	06/18/2013	< 67	67	67	< 60	60	60	< 63.5
	09/18/2013	< 67 J	67	67	< 160 J	160	160	< 113
	12/13/2013	47	14	24	38 J	9.3	47	85
GW-3	03/20/2013	< 74	74	74	< 110	110	110	< 92
	06/18/2013	< 38	38	38	< 39 J	39	39	< 38.5
	09/17/2013	< 24 J	24	24	< 76 J	76	76	< 50
	12/13/2013	43	14	24	46 J	9.3	47	89
GW-4	03/20/2013	< 150	150	150	320	19	95	395
	06/18/2013	< 34	34	34	< 62	62	62	< 48
	09/17/2013	< 100 J	100	100	< 160 J	160	160	< 130
	12/13/2013	100	14	24	120	9.3	47	220
S1-AD	02/21/2013	68	30	51	< 70	70	70	103
	03/19/2013	33 J	28	47	< 51 J	51	51	58.5
	09/17/2013	< 110 J	110	110	< 170 J	170	170	< 140

Table 7
Calculated Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Sample Date	DRO (micrograms per liter) ¹			ORO (micrograms per liter) ¹			Calculated NWTPH-Dx ² (micrograms per liter)
		Result	MDL	MRL	Result	MDL	MRL	
S1-AU	02/21/2013	59	30	51	< 46 J	46	46	82
	03/19/2013	< 28	28	47	< 48 J	48	48	< 38
	09/17/2013	< 170	170	170	< 260	260	260	< 215
S1-BD	02/21/2013	64	28	47	< 75 J	75	75	101
	03/19/2013	39 J	28	47	< 59 J	59	59	68.5
	09/17/2013	< 62 J	62	62	< 31 J	31	31	< 46.5
S1-BU	02/21/2013	67	28	47	< 120	120	120	127
	03/19/2013	< 28	28	47	< 49 J	49	49	< 38.5
	09/17/2013	< 61 J	61	61	< 95 J	95	95	< 78
S2-AD	02/21/2013	66	28	48	< 78 J	78	78	105
	03/19/2013	31 J	28	48	< 56 J	56	56	59
	09/17/2013	< 75 J	75	75	< 140 J	140	140	< 107
S2-AU	02/21/2013	85	28	47	< 64 J	64	64	117
	03/19/2013	< 28	28	47	< 51 J	51	51	< 39.5
	09/17/2013	< 62 J	62	62	< 100 J	100	100	< 81
S2-BD	02/21/2013	< 80	80	80	110	19	95	150
	03/19/2013	35 J	28	47	< 53 J	53	53	61.5
	09/17/2013	< 95 J	95	95	< 220 J	220	220	< 157
S2-BU	02/21/2013	< 95	95	95	44 J	19	95	91.5
	02/21/2013	< 180	180	180	86 J	19	95	176
	03/19/2013	37 J	28	47	< 57 J	57	57	65.5
	09/17/2013	350 J	18	120	< 310 J	310	310	505
S3-AD	02/21/2013	< 58	58	58	27 J	19	95	56
	03/19/2013	< 28	28	47	< 55 J	55	55	< 41.5
	09/17/2013	< 51 J	51	51	< 110 J	110	110	< 80.5
S3-AU	02/21/2013	< 100	100	100	29 J	19	95	79
	03/19/2013	42 J	28	48	< 80 J	80	80	82
	09/17/2013	< 60 J	60	60	< 100 J	100	100	< 80
S3-BD	02/21/2013	< 65	65	65	30 J	19	95	62.5
	03/19/2013	< 28	28	47	< 49 J	49	49	< 38.5
	09/17/2013	< 18	18	120	< 64 J	64	64	< 41
S3-BU	02/21/2013	< 83	83	83	38 J	19	95	79.5
	03/19/2013	30 J	28	47	< 61 J	61	61	60.5
	09/17/2013	< 44 J	44	44	< 100 J	100	100	< 72
S3-CD	02/21/2013	< 65	65	65	24 J	19	95	56.5
	03/19/2013	28 J	28	47	< 54 J	54	54	55
	09/17/2013	< 79 J	79	79	< 95 J	95	95	< 87
S3-CU	02/21/2013	51	29	50	< 42 J	42	42	72
	03/19/2013	< 28	28	47	< 53 J	53	53	< 40.5
	09/17/2013	< 55 J	55	55	< 120 J	120	120	< 87.5
S4-AD	02/21/2013	< 63	63	63	20 J	19	95	51.5
	03/19/2013	< 28	28	47	< 49 J	49	49	< 38.5
	09/17/2013	< 110 J	110	110	< 180 J	180	180	< 145
S4-AU	02/21/2013	< 51	51	51	< 19	19	95	< 35
	03/19/2013	< 28	28	47	< 49 J	49	49	< 38.5
	09/17/2013	< 170	170	170	< 200 J	200	200	< 185
S4-BD	02/21/2013	< 77	77	77	60 J	19	94	98.5
	03/19/2013	< 28	28	47	< 49 J	49	49	< 38.5
	09/17/2013	< 94 J	94	94	< 230 J	230	230	< 162

Table 7
Calculated Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-043

Location	Sample Date	DRO (micrograms per liter) ¹			ORO (micrograms per liter) ¹			Calculated NWTPH-Dx ² (micrograms per liter)
		Result	MDL	MRL	Result	MDL	MRL	
S4-BU	02/21/2013	< 61	61	61	29 J	19	95	59.5
	02/21/2013	< 120	120	120	110	19	95	170
	03/19/2013	29 J	28	47	< 56 J	56	56	57
	09/17/2013	< 150 J	150	150	< 370 J	370	370	< 260
S4-CD	02/21/2013	< 73	73	73	76 J	19	94	112.5
	03/19/2013	< 28	28	47	< 56 J	56	56	< 42
	09/17/2013	< 140 J	140	140	< 240 J	240	240	< 190
S4-CU	02/21/2013	< 180	180	180	100	19	95	190
	03/19/2013	73	28	47	< 76 J	76	76	111
	09/17/2013	< 120 J	120	120	< 270 J	270	270	< 195
Levee Zone Monitoring Wells								
5-W-14	03/19/2013	35 J	28	48	< 52 J	52	52	61
	06/18/2013	< 26	26	26	< 32 J	32	32	< 29
	09/17/2013	< 85 J	85	85	< 150 J	150	150	< 117
	12/14/2013	23 J	14	24	27 J	9.4	48	50
5-W-15	03/19/2013	480	28	48	350	19	97	830
	06/18/2013	160	14	25	190	9.7	50	350
	09/17/2013	< 330 J	330	330	< 310 J	310	310	< 320
	12/14/2013	340	14	24	330	9.4	48	670
5-W-16	03/19/2013	38 J	29	49	< 63 J	63	63	69.5
	06/18/2013	< 30	30	30	< 44 J	44	44	< 37
	09/16/2013	< 29 J	29	29	< 30 J	30	30	< 29.5
	12/13/2013	39	14	24	45 J	9.4	48	84
5-W-17	03/19/2013	< 28	28	48	< 57 J	57	57	< 42.5
	06/18/2013	< 21 J	21	21	< 26 J	26	26	< 23.5
	09/17/2013	< 81 J	81	81	< 150 J	150	150	< 115
	12/14/2013	70	14	24	84	9.3	48	154
5-W-18	03/19/2013	140	28	49	< 180	180	180	230
	06/18/2013	130	14	24	170	9.5	49	300
	09/17/2013	< 160 J	160	160	< 210 J	210	210	< 185
	12/14/2013	110	14	24	130	9.4	48	240
5-W-19	03/19/2013	< 29	29	49	< 53 J	53	53	< 41
	06/18/2013	< 33	33	33	< 54	54	54	< 43.5
	09/16/2013	< 35 J	35	35	< 39 J	39	39	< 37
	12/13/2013	15 J	14	24	18 J	9.3	47	33
Monitoring Wells Down-Gradient of the Hydraulic Control and Containment System								
1B-W-23	03/20/2013	< 83	83	83	< 120	120	120	< 101
	06/18/2013	< 61	61	61	100	9.3	47	130
	09/18/2013	< 65 J	65	65	< 95 J	95	95	< 80
	12/13/2013	33	14	24	40 J	9.3	47	73
2A-W-40	03/19/2013	51	28	47	< 110	110	110	106
	06/19/2013	< 15 J	15	15	< 17 J	17	17	< 16
	09/17/2013	< 60 J	60	60	< 110 J	110	110	< 85
	12/13/2013	43	14	24	31 J	9.3	47	74
2A-W-41	03/20/2013	< 95	95	95	< 130	130	130	< 112
	06/19/2013	< 41	41	41	< 55	55	55	< 48
	09/17/2013	< 110 J	110	110	< 130 J	130	130	< 120
	12/13/2013	140	14	24	140	9.4	48	280

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BNSF Former Maintenance and Fueling Facility
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Farallon PN: 683-043

Location	Sample Date	DRO (micrograms per liter) ¹			ORO (micrograms per liter) ¹			Calculated NWTPH-Dx ² (micrograms per liter)
		Result	MDL	MRL	Result	MDL	MRL	
2A-W-42	03/20/2013	420	28	47	600	19	95	1,020
	06/18/2013	100	14	24	100	9.3	48	200
	09/17/2013	< 200	200	200	< 170 J	170	170	< 185
	12/13/2013	200	14	24	170	9.3	47	370
5-W-50	03/19/2013	1,100 J	28	48	860 J	19	95	1,960
	09/16/2013	1,600 J	19	120	660 J	29	250	2,260
5-W-54	03/19/2013	59	28	48	< 98	98	98	108
	09/17/2013	< 19	19	120	< 62 J	62	62	< 40.5
5-W-55	03/19/2013	55	28	48	< 100	100	100	105
	09/16/2013	< 160 J	160	160	< 250	250	250	< 205
5-W-56	03/19/2013	< 95	95	95	< 190	190	190	< 142
	09/16/2013	1,800 J	18	120	820 J	28	240	2,620
Site-Wide Monitoring Wells								
1A-W-4	03/20/2013	< 33 J	33	33	< 74 J	74	74	< 53.5
	09/18/2013	< 46 J	46	46	< 130 J	130	130	< 88
1B-W-2	03/20/2013	< 110 J	110	110	320 J	19	98	375
	09/18/2013	< 95 J	95	95	< 85 J	85	85	< 90
	12/13/2013	58 J	14	24	82 J	9.3	47	140
1B-W-3	03/20/2013	< 71 J	71	71	< 120 J	120	120	< 95.5
	07/31/2013	< 42 J	42	42	< 60 J	60	60	< 51
	08/26/2013	30 J	15	130	33 J	9.8	250	63
	09/18/2013	< 70 J	70	70	< 130 J	130	130	< 100
	10/23/2013	82	14	24	61	9.3	47	143
	11/19/2013	45 J	14	120	< 55	55	55	72.5
	12/13/2013	110	14	24	77	9.3	47	187
1C-W-3	03/20/2013	< 50	50	50	< 110	110	110	< 80
	09/18/2013	< 59 J	59	59	< 150 J	150	150	< 104
1C-W-4	03/20/2013	460 J	29	49	350 J	19	98	810
	09/18/2013	< 69 J	69	69	< 77 J	77	77	< 73
	12/13/2013	130	14	24	110	9.4	48	240
2A-W-8	09/18/2013	< 67 J	67	67	< 120 J	120	120	< 93.5
MW-16	03/19/2013	46 J	28	47	< 75 J	75	75	83.5
	09/18/2013	< 89 J	89	89	< 140 J	140	140	< 114
MW-38R	03/19/2013	120	28	48	< 130	130	130	185
	09/17/2013	< 82 J	82	82	< 140 J	140	140	< 111

NOTES:

Bold denotes concentration exceeds 208 ug/l TPH cleanup level (Levee Zone) or exceeds 477 ug/l TPH remediation level (all zones except Levee Zone).

< denotes analyte not detected at or exceeding the laboratory method detection limit,

¹Analyzed by Northwest Method NWTPH-Dx

²The total NWTPH-Dx calculation uses one-half the MDL for non-detectable concentrations to derive the sum of the DRO and ORO results obtained using the NWTPH-Dx analytical method. If either the DRO or the ORO concentration was reported as a detect, then the calculated Total TPH concentration is indicated as a detect. If both DRO and ORO concentrations were reported as non-detects, then the calculated Total TPH concentration is indicated as a non-detect. Note that the laboratory for the January event did not provide results less than the MRL so the MRL was used in calculations instead of the MDL for this event only.

J = The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.

MDL = laboratory-specified method detection limit

MRL = laboratory-specified method reporting limit

µg/l = micrograms per liter

DRO = total petroleum hydrocarbons as diesel-range organics

ORO = total petroleum hydrocarbons as oil-range organics

**APPENDIX A
LABORATORY ANALYTICAL REPORTS
(PROVIDED ON CD IN PRINT REPORT)**

2013 SITE-WIDE
GROUNDWATER MONITORING REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-043

February 12, 2013

Tad Cline
Farallon Consulting LLC
975 5th Avenue NW
Issaquah, WA 98027

RE: Project: 683-043 SKYKOMISH BNSF
Pace Project No.: 10219055

Dear Tad Cline:

Enclosed are the analytical results for sample(s) received by the laboratory on February 01, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carol Davy

carol.davy@pacelabs.com
Project Manager

Enclosures

cc: Desiree Clement, Farallon
Kristin Darnell, BNSF_Farallon - WA
Emerald Erickson-Mulanax, Farallon
Jerry Portele, Farallon
Javan Ruark, Farallon Consulting LLC



REPORT OF LABORATORY ANALYSIS

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Page 1 of 2

PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 2 of 2

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without the written consent of Pace Analytical Services, Inc..



1311 N. 35th St.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Pace Analytical Minnesota

Carol Davy
1700 Elm Street, Ste. 200
Minneapolis, Minnesota 55414

RE: 683-043 Skykomish BNSF

Lab ID: 1302025

February 12, 2013

Attention Carol Davy:

Fremont Analytical, Inc. received 4 sample(s) on 2/6/2013 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

A handwritten signature in dark ink, appearing to read "M. Dee", is written over a light blue horizontal line.

Michael Dee
Sr. Chemist / Principal



Date: 02/12/2013

CLIENT: Pace Analytical Minnesota
Project: 683-043 Skykomish BNSF
Lab Order: 1302025

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1302025-001	1C-W-8-012913	01/29/2013 10:40 AM	02/06/2013 9:30 AM
1302025-002	1C-W-1-012913	01/29/2013 11:28 AM	02/06/2013 9:30 AM
1302025-003	1C-W-7-012913	01/29/2013 11:55 AM	02/06/2013 9:30 AM
1302025-004	1C-W-70-012913	01/29/2013 5:00 PM	02/06/2013 9:30 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Pace Analytical Minnesota

Project: 683-043 Skykomish BNSF

I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



CLIENT: Pace Analytical Minnesota
Project: 683-043 Skykomish BNSF

Lab ID: 1302025-001

Collection Date: 1/29/2013 10:40:00 AM

Client Sample ID: 1C-W-8-012913

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>					Batch ID: 4045	Analyst: BR
Diesel (Fuel Oil)	ND	50.0		µg/L	1	2/6/2013 11:22:00 PM
Heavy Oil	489	100		µg/L	1	2/6/2013 11:22:00 PM
Surr: 2-Fluorobiphenyl	117	50-150		%REC	1	2/6/2013 11:22:00 PM
Surr: o-Terphenyl	111	50-150		%REC	1	2/6/2013 11:22:00 PM

NOTES:

Chromographic pattern is similar to transformer oil.

Lab ID: 1302025-002

Collection Date: 1/29/2013 11:28:00 AM

Client Sample ID: 1C-W-1-012913

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>					Batch ID: 4045	Analyst: BR
Diesel (Fuel Oil)	ND	50.0		µg/L	1	2/6/2013 11:49:00 PM
Heavy Oil	ND	100		µg/L	1	2/6/2013 11:49:00 PM
Surr: 2-Fluorobiphenyl	101	50-150		%REC	1	2/6/2013 11:49:00 PM
Surr: o-Terphenyl	97.2	50-150		%REC	1	2/6/2013 11:49:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
RL Reporting Limit

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits



CLIENT: Pace Analytical Minnesota
Project: 683-043 Skykomish BNSF

Lab ID: 1302025-003

Collection Date: 1/29/2013 11:55:00 AM

Client Sample ID: 1C-W-7-012913

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>					Batch ID: 4045	Analyst: BR
Diesel (Fuel Oil)	ND	50.0		µg/L	1	2/7/2013 12:17:00 AM
Heavy Oil	ND	100		µg/L	1	2/7/2013 12:17:00 AM
Surr: 2-Fluorobiphenyl	86.5	50-150		%REC	1	2/7/2013 12:17:00 AM
Surr: o-Terphenyl	81.4	50-150		%REC	1	2/7/2013 12:17:00 AM

Lab ID: 1302025-004

Collection Date: 1/29/2013 5:00:00 PM

Client Sample ID: 1C-W-70-012913

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>					Batch ID: 4045	Analyst: BR
Diesel (Fuel Oil)	ND	50.0		µg/L	1	2/7/2013 12:44:00 AM
Heavy Oil	ND	100		µg/L	1	2/7/2013 12:44:00 AM
Surr: 2-Fluorobiphenyl	111	50-150		%REC	1	2/7/2013 12:44:00 AM
Surr: o-Terphenyl	107	50-150		%REC	1	2/7/2013 12:44:00 AM

Qualifiers:
 B Analyte detected in the associated Method Blank
 E Value above quantitation range
 J Analyte detected below quantitation limits
 RL Reporting Limit

D Dilution was required
 H Holding times for preparation or analysis exceeded
 ND Not detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

Work Order: 1302025
CLIENT: Pace Analytical Minnesota
Project: 683-043 Skykomish BNSF

QC SUMMARY REPORT
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: 1302025-004ADUP	SampType: DUP	Units: µg/L	Prep Date: 2/6/2013	RunNo: 7383							
Client ID: 1C-W-70-012913	Batch ID: 4045		Analysis Date: 2/7/2013	SeqNo: 145536							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	50.0						0	0	30	
Heavy Oil	ND	100						0	0	30	
Surr: 2-Fluorobiphenyl	141		160.0		87.9	50	150		0		
Surr: o-Terphenyl	132		160.0		82.3	50	150		0		

Sample ID: LCS-4045	SampType: LCS	Units: µg/L	Prep Date: 2/6/2013	RunNo: 7383							
Client ID: LCSW	Batch ID: 4045		Analysis Date: 2/6/2013	SeqNo: 145539							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	1,800	50.0	2,000	0	89.9	65	135				
Surr: 2-Fluorobiphenyl	152		160.0		94.7	50	150				
Surr: o-Terphenyl	176		160.0		110	50	150				

Sample ID: MB-4045	SampType: MBLK	Units: µg/L	Prep Date: 2/6/2013	RunNo: 7383							
Client ID: MBLKW	Batch ID: 4045		Analysis Date: 2/6/2013	SeqNo: 145540							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	50.0									
Heavy Oil	ND	100									
Surr: 2-Fluorobiphenyl	163		160.0		102	50	150				
Surr: o-Terphenyl	151		160.0		94.1	50	150				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Client Name: **PACEMINN**

 Work Order Number: **1302025**

 Logged by: **Clare Griggs**

 Date Received: **2/6/2013 9:30:00 AM**
Chain of Custody

1. Were custodial seals present? Yes No Not Required
2. Is Chain of Custody complete? Yes No Not Present
3. How was the sample delivered? Client

Log In

4. Coolers are present? Yes No NA
5. Was an attempt made to cool the samples? Yes No NA
6. Were all coolers received at a temperature of >0° C to 10.0°C Yes No NA
7. Sample(s) in proper container(s)? Yes No
8. Sufficient sample volume for indicated test(s)? Yes No
9. Are samples properly preserved? Yes No
10. Was preservative added to bottles? Yes No NA
11. Is there headspace present in VOA vials? Yes No NA
12. Did all sample containers arrive in good condition?(unbroken) Yes No
13. Does paperwork match bottle labels? Yes No
14. Are matrices correctly identified on Chain of Custody? Yes No
15. Is it clear what analyses were requested? Yes No
16. Were all holding times able to be met? Yes No

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

18. Additional remarks/Discrepancies

Item Information

Item #	Temp °C	Condition
Cooler	4.4	Good
Temp Blank	1.3	Good

1301025



Chain of Custody

Workorder: 10219055 Workorder Name: 683-043 SKYKOMISH BNSF Results Requested 2/8/2013

Report Invoice To: Subcontract To

Carol Davy
Pace Analytical Minnesota
1700 Elm Street
Suite 200
Minneapolis, MN 55414
Phone (612)607-1700
Email: carol.davy@pacelabs.com

P.O. 10219055

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers		Requested Analysis
					TH		
1	1C-W-6-012913	1/29/2013 10:40	10219055001	Water	/		
2	1C-W-1-012913	1/29/2013 11:28	10219055002	Water	/		
3	1C-W-7-012913	1/29/2013 11:55	10219055003	Water	/		
4	1C-W-70-012913	1/29/2013 17:00	10219055004	Water	/		
5							

XXXX NWTPH-DX
w/o silic gel
clean up

Transfers	Released By	Date/Time	Received By	Date/Time	Received on Ice	Y or N	Custody Seal	Y or N	Samples Intact	Y or N
1	Carol Davy / pacelabs	2/5/13 11:15	[Signature]	2/6/13 9:30						
2										
3										

\$ 39.00 quoted price

Cooler Temperature on Receipt 4.4 °C

Sample Condition Upon Receipt

Client Name: Farallon Project #: WO# : 10219055

WO# : 10219055



10219055

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Tracking Number: 52873746 81664

Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No

Optional: Proj. Due Date: _____ Proj. Name: _____

Packing Material: Bubble Wrap Bubble Bags None Other: _____ Temp Blank? Yes No

Thermom. Used: B88A912167504 80512447 72337080 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temp Read (°C): 1.4 Cooler Temp Corrected (°C): 1.4 Biological Tissue Frozen? Yes No

Temp should be above freezing to 6°C Correction Factor: True Date and Initials of Person Examining Contents: 2/1/13 LC

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes Date/Time/ID/Analysis Matrix: <u>Wk</u>		
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed: _____ Lot # of added preservative: _____
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: Ted Cline Date/Time: 2-7-13 12:13

Comments/Resolution: Can we report at 0.15 mg/L for Dx? NO

Sony Partele 2/5/13 - OK to subcontract to Fremont Analytical

Project Manager Review:

Date: 2-5-13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-37181-1

Client Project/Site: BNSF Skykomish Ground Water
Revision: 1

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele



Authorized for release by:
3/13/2013 4:28:15 PM

Kristine Allen
Project Manager I
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Job ID: 580-37181-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 2/22/2013 4:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 2.5° C, 2.7° C, 4.3° C, 5.0° C and 5.0° C.

Except:

The COC was not signed as relinquished.

The container label on one HCl amber for the following sample did not match the information listed on the Chain-of-Custody (COC): S4BU-022113 (580-37181-4). The container label lists S4DU-022113 as the sample ID while the COC lists S4BU-022113. The sample was logged in per COC for sample ID as the date and time of sampling match.

The containers for sample S1BU-022113 (580-37181-21) were received without LOT numbers.

GC Semi VOA - Method(s) NWTPH-Dx:

For samples S4CD-022113 (580-37181-1), S4BD-022113 (580-37181-3), S40BU-022113 (580-37181-5), S4AD-022113 (580-37181-6), S4AU-022113 (580-37181-7), S3CD-022113 (580-37181-8), S3BD-022113 (580-37181-10), S3BU-022113 (580-37181-11), S3AD-022113 (580-37181-12), S30AD-022113 (580-37181-13), S3AU-022113 (580-37181-14), S2BU-022113 (580-37181-16), and S20BU-022113 (580-37181-17), the results in the C10-C24 range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended.

For samples S4CU-022113 (580-37181-2), S4BU-022113 (580-37181-4), and S2BD-022113 (580-37181-15), the results in the C10-C24 and Motor Oil range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, motor oil, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended.

For samples S2AD-022113 (580-37181-18), S2AU-022113 (580-37181-19), S1BD-022113 (580-37181-20), and S1AD-022113 (580-37181-22), the results in the C10-C24 range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended.

For samples S1BU-022113 (580-37181-21), 1C-W-7-022113 (580-37181-24), 1C-W-70-022113 (580-37181-25), 1C-W-8-022113 (580-37181-26), and 1C-W-1-022113 (580-37181-27), the results in the C10-C24 and Motor Oil range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, motor oil, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended.

For samples S3CU-022113 (580-37181-9) and S1AU-022113 (580-37181-23), the results in the C10-C24 range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended.

The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Organic Prep - Method(s) 3510C:

Less than 1000mLs sample was provided for samples S3CU-022113 (580-37181-9), S1AD-022113 (580-37181-22), and S1AU-022113 (580-37181-23).

No other analytical or quality issues were noted.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
Y	The chromatographic response resembles a typical fuel pattern.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S4CD-022113

Lab Sample ID: 580-37181-1

Date Collected: 02/21/13 13:30

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.073	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 11:47	1
Motor Oil (>C24-C36)	0.076	J	0.094	0.019	mg/L		02/25/13 19:41	02/27/13 11:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				02/25/13 19:41	02/27/13 11:47	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S4CU-022113

Lab Sample ID: 580-37181-2

Date Collected: 02/21/13 13:50

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.18	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 12:05	1
Motor Oil (>C24-C36)	0.10	Y	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 12:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	74		50 - 150				02/25/13 19:41	02/27/13 12:05	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S4BD-022113

Lab Sample ID: 580-37181-3

Date Collected: 02/21/13 14:05

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.077	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 12:22	1
Motor Oil (>C24-C36)	0.060	J	0.094	0.019	mg/L		02/25/13 19:41	02/27/13 12:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				02/25/13 19:41	02/27/13 12:22	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S4BU-022113

Lab Sample ID: 580-37181-4

Date Collected: 02/21/13 14:25

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 12:40	1
Motor Oil (>C24-C36)	0.11	Y	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 12:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				02/25/13 19:41	02/27/13 12:40	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S40BU-022113

Lab Sample ID: 580-37181-5

Date Collected: 02/21/13 14:30

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.061	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 12:58	1
Motor Oil (>C24-C36)	0.029	J	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 12:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	85		50 - 150				02/25/13 19:41	02/27/13 12:58	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S4AD-022113

Lab Sample ID: 580-37181-6

Date Collected: 02/21/13 14:45

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.063	Y B	0.048	0.028	mg/L		02/25/13 19:41	02/27/13 13:16	1
Motor Oil (>C24-C36)	0.020	J	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 13:16	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	84		50 - 150				02/25/13 19:41	02/27/13 13:16	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S4AU-022113

Lab Sample ID: 580-37181-7

Date Collected: 02/21/13 15:15

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.051	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 13:34	1
Motor Oil (>C24-C36)	ND		0.095	0.019	mg/L		02/25/13 19:41	02/27/13 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	91		50 - 150				02/25/13 19:41	02/27/13 13:34	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S3CD-022113

Lab Sample ID: 580-37181-8

Date Collected: 02/21/13 15:29

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.065	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 15:54	1
Motor Oil (>C24-C36)	0.024	J	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 15:54	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	<i>84</i>		<i>50 - 150</i>				<i>02/25/13 19:41</i>	<i>02/27/13 15:54</i>	<i>1</i>

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S3CU-022113

Lab Sample ID: 580-37181-9

Date Collected: 02/21/13 15:37

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.051	Y	0.050	0.029	mg/L		02/25/13 19:47	02/27/13 19:46	1
Motor Oil (>C24-C36)	0.042	J B	0.10	0.020	mg/L		02/25/13 19:47	02/27/13 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				02/25/13 19:47	02/27/13 19:46	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S3BD-022113

Lab Sample ID: 580-37181-10

Date Collected: 02/21/13 15:56

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.065	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 16:12	1
Motor Oil (>C24-C36)	0.030	J	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 16:12	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	85		50 - 150				02/25/13 19:41	02/27/13 16:12	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S3BU-022113

Lab Sample ID: 580-37181-11

Date Collected: 02/21/13 16:05

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.083	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 16:30	1
Motor Oil (>C24-C36)	0.038	J	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 16:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				02/25/13 19:41	02/27/13 16:30	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S3AD-022113

Lab Sample ID: 580-37181-12

Date Collected: 02/21/13 16:19

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.058	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 16:48	1
Motor Oil (>C24-C36)	0.027	J	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 16:48	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	84		50 - 150				02/25/13 19:41	02/27/13 16:48	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S30AD-022113

Lab Sample ID: 580-37181-13

Date Collected: 02/21/13 16:25

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.058	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 17:06	1
Motor Oil (>C24-C36)	0.069	J	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 17:06	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	89		50 - 150				02/25/13 19:41	02/27/13 17:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S3AU-022113

Lab Sample ID: 580-37181-14

Date Collected: 02/21/13 16:37

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 17:23	1
Motor Oil (>C24-C36)	0.029	J	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 17:23	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	83		50 - 150				02/25/13 19:41	02/27/13 17:23	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S2BD-022113

Lab Sample ID: 580-37181-15

Date Collected: 02/21/13 16:57

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.080	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 17:41	1
Motor Oil (>C24-C36)	0.11	Y	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 17:41	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	80		50 - 150				02/25/13 19:41	02/27/13 17:41	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S2BU-022113

Lab Sample ID: 580-37181-16

Date Collected: 02/21/13 17:10

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.18	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 17:59	1
Motor Oil (>C24-C36)	0.086	J	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 17:59	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	84		50 - 150				02/25/13 19:41	02/27/13 17:59	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S20BU-022113

Lab Sample ID: 580-37181-17

Date Collected: 02/21/13 17:20

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.095	Y B	0.047	0.028	mg/L		02/25/13 19:41	02/27/13 18:17	1
Motor Oil (>C24-C36)	0.044	J	0.095	0.019	mg/L		02/25/13 19:41	02/27/13 18:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				02/25/13 19:41	02/27/13 18:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S2AD-022113

Lab Sample ID: 580-37181-18

Date Collected: 02/21/13 17:24

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.066	Y	0.048	0.028	mg/L		02/25/13 19:47	02/27/13 16:12	1
Motor Oil (>C24-C36)	0.078	J B	0.095	0.019	mg/L		02/25/13 19:47	02/27/13 16:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				02/25/13 19:47	02/27/13 16:12	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S2AU-022113

Lab Sample ID: 580-37181-19

Date Collected: 02/21/13 17:30

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.085	Y	0.047	0.028	mg/L		02/25/13 19:47	02/27/13 16:30	1
Motor Oil (>C24-C36)	0.064	J B	0.095	0.019	mg/L		02/25/13 19:47	02/27/13 16:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				02/25/13 19:47	02/27/13 16:30	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S1BD-022113

Lab Sample ID: 580-37181-20

Date Collected: 02/21/13 17:46

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.064	Y	0.047	0.028	mg/L		02/25/13 19:47	02/27/13 16:48	1
Motor Oil (>C24-C36)	0.075	J B	0.095	0.019	mg/L		02/25/13 19:47	02/27/13 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				02/25/13 19:47	02/27/13 16:48	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S1BU-022113

Lab Sample ID: 580-37181-21

Date Collected: 02/21/13 18:09

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.067	Y	0.047	0.028	mg/L		02/25/13 19:47	02/27/13 17:06	1
Motor Oil (>C24-C36)	0.12	Y B	0.094	0.019	mg/L		02/25/13 19:47	02/27/13 17:06	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	89		50 - 150				02/25/13 19:47	02/27/13 17:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S1AD-022113

Lab Sample ID: 580-37181-22

Date Collected: 02/21/13 18:15

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.068	Y	0.051	0.030	mg/L		02/25/13 19:47	02/27/13 17:23	1
Motor Oil (>C24-C36)	0.070	J B	0.10	0.020	mg/L		02/25/13 19:47	02/27/13 17:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				02/25/13 19:47	02/27/13 17:23	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S1AU-022113

Lab Sample ID: 580-37181-23

Date Collected: 02/21/13 18:30

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.059	Y	0.051	0.030	mg/L		02/25/13 19:47	02/27/13 17:41	1
Motor Oil (>C24-C36)	0.046	J B	0.10	0.020	mg/L		02/25/13 19:47	02/27/13 17:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				02/25/13 19:47	02/27/13 17:41	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: 1C-W-7-022113

Lab Sample ID: 580-37181-24

Date Collected: 02/21/13 10:45

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.20	Y	0.047	0.028	mg/L		02/25/13 19:47	02/27/13 17:59	1
Motor Oil (>C24-C36)	0.13	Y B	0.095	0.019	mg/L		02/25/13 19:47	02/27/13 17:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				02/25/13 19:47	02/27/13 17:59	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: 1C-W-70-022113

Lab Sample ID: 580-37181-25

Date Collected: 02/21/13 16:59

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.21	Y	0.047	0.028	mg/L		02/25/13 19:47	02/27/13 18:17	1
Motor Oil (>C24-C36)	0.18	Y B	0.095	0.019	mg/L		02/25/13 19:47	02/27/13 18:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				02/25/13 19:47	02/27/13 18:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: 1C-W-8-022113

Lab Sample ID: 580-37181-26

Date Collected: 02/21/13 11:30

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.24	Y	0.047	0.028	mg/L		02/25/13 19:47	02/27/13 18:35	1
Motor Oil (>C24-C36)	0.16	Y B	0.094	0.019	mg/L		02/25/13 19:47	02/27/13 18:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				02/25/13 19:47	02/27/13 18:35	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: 1C-W-1-022113

Lab Sample ID: 580-37181-27

Date Collected: 02/21/13 12:00

Matrix: Water

Date Received: 02/22/13 16:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	Y	0.047	0.028	mg/L		02/25/13 19:47	02/27/13 18:52	1
Motor Oil (>C24-C36)	0.11	Y B	0.095	0.019	mg/L		02/25/13 19:47	02/27/13 18:52	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	89		50 - 150				02/25/13 19:47	02/27/13 18:52	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-130762/1-A

Matrix: Water

Analysis Batch: 130859

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 130762

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.0498	J	0.050	0.029	mg/L		02/25/13 19:41	02/27/13 10:54	1
Motor Oil (>C24-C36)	ND		0.10	0.020	mg/L		02/25/13 19:41	02/27/13 10:54	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				02/25/13 19:41	02/27/13 10:54	1

Lab Sample ID: LCS 580-130762/2-A

Matrix: Water

Analysis Batch: 130859

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 130762

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	1.00	1.02		mg/L		102	70 - 140
Motor Oil (>C24-C36)	1.00	1.04		mg/L		104	66 - 125
Surrogate	%Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	90		50 - 150				

Lab Sample ID: LCSD 580-130762/3-A

Matrix: Water

Analysis Batch: 130859

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 130762

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	1.00	0.995		mg/L		100	70 - 140	2	27
Motor Oil (>C24-C36)	1.00	1.03		mg/L		103	66 - 125	2	27
Surrogate	%Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	91		50 - 150						

Lab Sample ID: MB 580-130763/1-A

Matrix: Water

Analysis Batch: 130860

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 130763

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.050	0.029	mg/L		02/25/13 19:47	02/27/13 15:19	1
Motor Oil (>C24-C36)	0.0405	J	0.10	0.020	mg/L		02/25/13 19:47	02/27/13 15:19	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				02/25/13 19:47	02/27/13 15:19	1

Lab Sample ID: LCS 580-130763/2-A

Matrix: Water

Analysis Batch: 130860

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 130763

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	1.00	0.893		mg/L		89	70 - 140
Motor Oil (>C24-C36)	1.00	1.05		mg/L		105	66 - 125

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-130763/2-A

Matrix: Water

Analysis Batch: 130860

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 130763

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	93	LCS	50 - 150

Lab Sample ID: LCSD 580-130763/3-A

Matrix: Water

Analysis Batch: 130860

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 130763

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>Limit</i>
#2 Diesel (C10-C24)	1.00	0.946		mg/L		95	70 - 140	6	27
Motor Oil (>C24-C36)	1.00	1.07		mg/L		107	66 - 125	2	27

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	94	LCSD	50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S4CD-022113

Lab Sample ID: 580-37181-1

Date Collected: 02/21/13 13:30

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 11:47	JL	TAL SEA

Client Sample ID: S4CU-022113

Lab Sample ID: 580-37181-2

Date Collected: 02/21/13 13:50

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 12:05	JL	TAL SEA

Client Sample ID: S4BD-022113

Lab Sample ID: 580-37181-3

Date Collected: 02/21/13 14:05

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 12:22	JL	TAL SEA

Client Sample ID: S4BU-022113

Lab Sample ID: 580-37181-4

Date Collected: 02/21/13 14:25

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 12:40	JL	TAL SEA

Client Sample ID: S40BU-022113

Lab Sample ID: 580-37181-5

Date Collected: 02/21/13 14:30

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 12:58	JL	TAL SEA

Client Sample ID: S4AD-022113

Lab Sample ID: 580-37181-6

Date Collected: 02/21/13 14:45

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 13:16	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S4AU-022113

Lab Sample ID: 580-37181-7

Date Collected: 02/21/13 15:15

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 13:34	JL	TAL SEA

Client Sample ID: S3CD-022113

Lab Sample ID: 580-37181-8

Date Collected: 02/21/13 15:29

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 15:54	JL	TAL SEA

Client Sample ID: S3CU-022113

Lab Sample ID: 580-37181-9

Date Collected: 02/21/13 15:37

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 19:46	JL	TAL SEA

Client Sample ID: S3BD-022113

Lab Sample ID: 580-37181-10

Date Collected: 02/21/13 15:56

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 16:12	JL	TAL SEA

Client Sample ID: S3BU-022113

Lab Sample ID: 580-37181-11

Date Collected: 02/21/13 16:05

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 16:30	JL	TAL SEA

Client Sample ID: S3AD-022113

Lab Sample ID: 580-37181-12

Date Collected: 02/21/13 16:19

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 16:48	JL	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S30AD-022113

Lab Sample ID: 580-37181-13

Date Collected: 02/21/13 16:25

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 17:06	JL	TAL SEA

Client Sample ID: S3AU-022113

Lab Sample ID: 580-37181-14

Date Collected: 02/21/13 16:37

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 17:23	JL	TAL SEA

Client Sample ID: S2BD-022113

Lab Sample ID: 580-37181-15

Date Collected: 02/21/13 16:57

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 17:41	JL	TAL SEA

Client Sample ID: S2BU-022113

Lab Sample ID: 580-37181-16

Date Collected: 02/21/13 17:10

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 17:59	JL	TAL SEA

Client Sample ID: S20BU-022113

Lab Sample ID: 580-37181-17

Date Collected: 02/21/13 17:20

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130762	02/25/13 19:41	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130859	02/27/13 18:17	JL	TAL SEA

Client Sample ID: S2AD-022113

Lab Sample ID: 580-37181-18

Date Collected: 02/21/13 17:24

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 16:12	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: S2AU-022113

Lab Sample ID: 580-37181-19

Date Collected: 02/21/13 17:30

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 16:30	JL	TAL SEA

Client Sample ID: S1BD-022113

Lab Sample ID: 580-37181-20

Date Collected: 02/21/13 17:46

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 16:48	JL	TAL SEA

Client Sample ID: S1BU-022113

Lab Sample ID: 580-37181-21

Date Collected: 02/21/13 18:09

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 17:06	JL	TAL SEA

Client Sample ID: S1AD-022113

Lab Sample ID: 580-37181-22

Date Collected: 02/21/13 18:15

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 17:23	JL	TAL SEA

Client Sample ID: S1AU-022113

Lab Sample ID: 580-37181-23

Date Collected: 02/21/13 18:30

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 17:41	JL	TAL SEA

Client Sample ID: 1C-W-7-022113

Lab Sample ID: 580-37181-24

Date Collected: 02/21/13 10:45

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 17:59	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Client Sample ID: 1C-W-70-022113

Lab Sample ID: 580-37181-25

Date Collected: 02/21/13 16:59

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 18:17	JL	TAL SEA

Client Sample ID: 1C-W-8-022113

Lab Sample ID: 580-37181-26

Date Collected: 02/21/13 11:30

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 18:35	JL	TAL SEA

Client Sample ID: 1C-W-1-022113

Lab Sample ID: 580-37181-27

Date Collected: 02/21/13 12:00

Matrix: Water

Date Received: 02/22/13 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			130763	02/25/13 19:47	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	130860	02/27/13 18:52	JL	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01115CA	01-31-14
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14



Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37181-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-37181-1	S4CD-022113	Water	02/21/13 13:30	02/22/13 16:40
580-37181-2	S4CU-022113	Water	02/21/13 13:50	02/22/13 16:40
580-37181-3	S4BD-022113	Water	02/21/13 14:05	02/22/13 16:40
580-37181-4	S4BU-022113	Water	02/21/13 14:25	02/22/13 16:40
580-37181-5	S40BU-022113	Water	02/21/13 14:30	02/22/13 16:40
580-37181-6	S4AD-022113	Water	02/21/13 14:45	02/22/13 16:40
580-37181-7	S4AU-022113	Water	02/21/13 15:15	02/22/13 16:40
580-37181-8	S3CD-022113	Water	02/21/13 15:29	02/22/13 16:40
580-37181-9	S3CU-022113	Water	02/21/13 15:37	02/22/13 16:40
580-37181-10	S3BD-022113	Water	02/21/13 15:56	02/22/13 16:40
580-37181-11	S3BU-022113	Water	02/21/13 16:05	02/22/13 16:40
580-37181-12	S3AD-022113	Water	02/21/13 16:19	02/22/13 16:40
580-37181-13	S30AD-022113	Water	02/21/13 16:25	02/22/13 16:40
580-37181-14	S3AU-022113	Water	02/21/13 16:37	02/22/13 16:40
580-37181-15	S2BD-022113	Water	02/21/13 16:57	02/22/13 16:40
580-37181-16	S2BU-022113	Water	02/21/13 17:10	02/22/13 16:40
580-37181-17	S20BU-022113	Water	02/21/13 17:20	02/22/13 16:40
580-37181-18	S2AD-022113	Water	02/21/13 17:24	02/22/13 16:40
580-37181-19	S2AU-022113	Water	02/21/13 17:30	02/22/13 16:40
580-37181-20	S1BD-022113	Water	02/21/13 17:46	02/22/13 16:40
580-37181-21	S1BU-022113	Water	02/21/13 18:09	02/22/13 16:40
580-37181-22	S1AD-022113	Water	02/21/13 18:15	02/22/13 16:40
580-37181-23	S1AU-022113	Water	02/21/13 18:30	02/22/13 16:40
580-37181-24	1C-W-7-022113	Water	02/21/13 10:45	02/22/13 16:40
580-37181-25	1C-W-70-022113	Water	02/21/13 16:59	02/22/13 16:40
580-37181-26	1C-W-8-022113	Water	02/21/13 11:30	02/22/13 16:40
580-37181-27	1C-W-1-022113	Water	02/21/13 12:00	02/22/13 16:40



RAILWAY
CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

Laboratory: **TEST AMERICA SEATTLE**
 Address: **5755 8TH STREET EAST**
 City/State/Zip: **TACOMA, WA, 98424**
 Project State of Origin: **WA**

Project Manager: **KATHINE ALLEN**
 Phone: **253 922 7310**
 Fax: **253 922 5017**

Project Number: **603-043**
 Tracking Number: **603-043**

LAB WORK ORDER: **37181**
 SHIPMENT INFORMATION

BNSF Project Name: **BNSF SKYLONISH GROUND WATER**
 BNSF Contact: **BRUCE SHEPPARD**
 Project City: **SKYLONISH, WA**
 BNSF Work Order No.: **15890044, WA, 98027**

Company: **FARLTON CONSULTING**
 Address: **975 5TH AVE NW**
 City/State/Zip: **ISSAQUAH, WA, 98027**

Project Manager: **TERRY PARELE**
 Phone: **425 295 0800**
 Fax: **425 295 0850**

TURNAROUND TIME
 1-day Rush
 2-day Rush
 Standard 10-Day
 3-day Rush
 5- to 8-day Rush
 Level III
 Level IV

DELIVERABLES
 BNSF Standard (Level II)
 EDD Req. Format?
 Other Deliverables?

METHODS FOR ANALYSIS

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered (Y/N)	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
1C-W-7-022413	2	2/21/13	1659	SB	N	G CW	X	NOT INCLUDED	
1C-W-8-022413	2	2/21/13	1130	SB	N	G CW	X	NOT INCLUDED	
1C-W-1-022113	2	2/21/13	1200	SB	N	G CW	X	NOT INCLUDED	
54CD-022113	2	2/21/13	1330	SB	N	G CW	X	NOT INCLUDED	-1
54CV-022113			1350						-2
54BD-022113			1405						-3
54BV-022113			1425						-4
54OBV-022113			1430						-5
54AD-022113			1445						-6
54AV-022113			1515						-7
53BD-022113			1529						-8
53CV-022113			1537						-9
53BD-022113			1556						-10
53BV-022113			1605						-11

Relinquished By: _____
 Date/Time: _____

Received By: **Nick Riley**
 Date/Time: **02/22/2013 1640**

Relinquished By: _____
 Date/Time: _____

Received By: **Nick Riley**
 Date/Time: **02/22/2013 1640**

Comments and Special Analytical Requirements:
1=ONE 7=SEVEN

Relinquished By: _____
 Date/Time: _____

Received By: _____
 Date/Time: _____

Relinquished By: _____
 Date/Time: _____

Received By: _____
 Date/Time: _____

Comments and Special Analytical Requirements:

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT



BNSF

CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

Project Number: **SKYKOMISH**
 Project City: **SKYKOMISH**
 Project State of Origin: **WA**

BNSF Project Name: **SKYKOMISH GROUND WATER**
 BNSF Contact: **BRUCE SHEPPARD**
 BNSF Work Order No.: **153AQA4H, WA, 98027**

TURNAROUND TIME
 1-day Rush
 5- to 8-day Rush
 2-day Rush
 Standard 10-Day
 3-day Rush
 Other _____

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 EDD Req. Format?
 Level IV

OTHER DELIVERABLES?
 Other _____

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler						
1C-W-7-022A13	2	2/21/13	1045	N	G	Geo		XD, HCL32		-24
1C-W-7-022A13			1059							-25
1C-W-8-022113			1130							-26
1C-W-1-022113			1200							-27

Handwritten signature/initials

5										
6										
7										
8										
9										
10										
11	Cooler/DB Dig/IR cor 5.0 ^u unc 4.9 ^u									
12	Cooler Dsc Lg Green/Blue @ Lab 1640									
13	Wet/Packs Packing Bubble									
14	W/OCs A1									
15										

LABORATORY INFORMATION

Laboratory: **TEST AMERICA SEATTLE**
 Address: **5355 8th STREET EAST**
 City/State/Zip: **TACOMA, WA, 98124**
 Project Manager: **KEISTINE AWEIN**
 Phone: _____
 Fax: _____

CONSULTANT INFORMATION

Company: **EMOTION CONSULTING**
 Address: **945 5th AVE NW**
 City/State/Zip: **ISSAQUAH, WA, 98027**
 Project Number: **085-043**
 Project Manager: **SEARX PERRELE**
 Email: **TRIPLEE@EMOTIONCONSULTING.COM**
 Phone: **425 295 0800**
 Fax: **425 295 0850**

LAB WORK ORDER:

37181

SHIPMENT INFORMATION

Shipment Method: _____
 Tracking Number: _____

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-37181-1

Login Number: 37181

List Number: 1

Creator: Riley, Nicole

List Source: TestAmerica Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	COC not relinquished.
Is the Field Sampler's name present on COC?	False	This information is not filled out on the COC.
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	Some containers received without LOT numbers.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-37663-1

Client Project/Site: BNSF Skykomish Ground Water

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele



Authorized for release by:
4/4/2013 5:33:15 PM

Kristine Allen
Project Manager I
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Job ID: 580-37663-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 3/22/2013 3:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 11 coolers at receipt time were 3.5° C, 5.2° C, 5.2° C, 5.7° C, 5.8° C, 5.8° C, 5.9° C, 5.9° C, 6.0° C, 6.3° C and 8.0° C.

Except:

The following samples were received at the laboratory outside the required temperature criteria: 5-W-50-031913 (580-37663-39), 1A-W-4-032013 (580-37663-45), 1B-W-3-032013 (580-37663-49), 1B-W-2-032013 (580-37663-52), 1C-W-4-032013 (580-37663-56). Cooler received with no ice in the bag and all water in the cooler. Cooler received outside of required temperature at 8.0°C.

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): 25-AU-031913 (580-37663-20), 25-AD-031913 (580-37663-21). The container labels list sample ID of S2-. The COC lists sample ID of 25-. Per the client all of the '25' in the sample IDs should be "2S."

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): 1C-W-7-032113 (580-37663-58). The container labels lists time of 0950. The COC lists time of 0954. Per the client the correct sampling time is 9:50.

The COC lists a sample ID of GW-4-032019 for sample 580-37663-53. The samples was logged in with the sample ID of GW-4-32013 as the last five numbers of the sample ID appear to be the sampling date.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 132527, the method blank for preparation batch 132436 contained Motor Oil above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 132527, the CCB for preparation batch 132436 contained #2 Diesel (C10-C24) and Motor Oil above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 132767, the method blank for preparation batch 132610 contained Motor Oil above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 132770, the method blank for preparation batch 132623 contained #2 Diesel (C10-C24) and Motor Oil above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 132764, the method blank for preparation batch 132637 contained #2 Diesel (C10-C24) and Motor Oil above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 132767, The CCB for preparation batch 132610 contained #2 Diesel (C10-C24) and Motor Oil above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 132853, the CCB for preparation batch 132623 contained C10-C24 and Motor Oil above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 132527, for the following sample(s) from preparation batch 132436: MW-30-0319 13 (580-37663-1), 5-W-18-031913 (580-37663-11) the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, motor oil, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Job ID: 580-37663-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

In analytical batch 132527, for the following sample(s) from preparation batch 132436: S4-CU-031913 (580-37663-3), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 132767, for the following sample(s) from preparation batch 132610: 5-W-15-031913 (580-37663-27), MW-38R-031913 (580-37663-29), MW-4-031913 (580-37663-30), 2A-W-9-031913 (580-37663-31), 5-W-55-031913 (580-37663-32), MW-3-031913 (580-37663-33), 2A-W-10-031913 (580-37663-34), 5-W-54-031913 (580-37663-35), 5-W-50-031913 (580-37663-39) the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, motor oil, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 132767, for the following sample(s) from preparation batch 132610: 540-AD-031913 (580-37663-36), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 132767, for the following sample(s) from preparation batch 132610: 2A-W-40-031913 (580-37663-40), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel, motor oil, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 132770, for the following sample(s) from preparation batch 132623: 5-W-56-031913 (580-37663-41), GW-2-031913 (580-37663-42), 2A-W-420-032013 (580-37663-43), GW-1-032013 (580-37663-44), EW-1-032013 (580-37663-46), 1B-W-23-032013 (580-37663-47) the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, motor oil, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 132853, for the following sample(s) from preparation batch 132623: 2-A-41-302013 (580-37663-48), 1B-W-3-032013 (580-37663-49), GW-3-032013 (580-37663-50), 2A-W-42-032013 (580-37663-51), 1B-W-2-032013 (580-37663-52), GW-4-032013 (580-37663-53), EW-A2-032013 (580-37663-54), 1C-W-3-032013 (580-37663-55), 1C-W-4-032013 (580-37663-56), 1B-W-230-032013 (580-37663-57), 1C-W-7-032113 (580-37663-58), 1C-W-70-032113 (580-37663-59), 1C-W-8-032113 (580-37663-60) the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, motor oil, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 132764, for the following sample(s) from preparation batch 132637: 1C-W-1-032113 (580-37663-61), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: MW-30-0319 13

Lab Sample ID: 580-37663-1

Date Collected: 03/19/13 19:59

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.051	Y	0.047	0.028	mg/L		03/26/13 11:40	03/27/13 18:47	1
Motor Oil (>C24-C36)	0.11	B Y	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 18:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				03/26/13 11:40	03/27/13 18:47	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S4-CD-031913

Lab Sample ID: 580-37663-2

Date Collected: 03/19/13 08:23

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.047	0.028	mg/L		03/26/13 11:40	03/27/13 19:05	1
Motor Oil (>C24-C36)	0.056	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 19:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				03/26/13 11:40	03/27/13 19:05	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S4-CU-031913

Lab Sample ID: 580-37663-3

Date Collected: 03/19/13 08:26

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.073	Y	0.047	0.028	mg/L		03/26/13 11:40	03/27/13 19:22	1
Motor Oil (>C24-C36)	0.076	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				03/26/13 11:40	03/27/13 19:22	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S4-BD-031913

Lab Sample ID: 580-37663-4

Date Collected: 03/19/13 08:36

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.047	0.028	mg/L		03/26/13 11:40	03/27/13 19:40	1
Motor Oil (>C24-C36)	0.049	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 19:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				03/26/13 11:40	03/27/13 19:40	1

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Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S4-BU-031913

Lab Sample ID: 580-37663-5

Date Collected: 03/19/13 08:47

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.029	J	0.047	0.028	mg/L		03/26/13 11:40	03/27/13 19:58	1
Motor Oil (>C24-C36)	0.056	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 19:58	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	67		50 - 150				03/26/13 11:40	03/27/13 19:58	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S4-AD-031913

Lab Sample ID: 580-37663-6

Date Collected: 03/19/13 08:53

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.047	0.028	mg/L		03/26/13 11:40	03/27/13 20:16	1
Motor Oil (>C24-C36)	0.049	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 20:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	76		50 - 150				03/26/13 11:40	03/27/13 20:16	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-19-031913

Lab Sample ID: 580-37663-7

Date Collected: 03/19/13 08:55

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.049	0.029	mg/L		03/26/13 11:40	03/27/13 20:34	1
Motor Oil (>C24-C36)	0.053	J B	0.098	0.019	mg/L		03/26/13 11:40	03/27/13 20:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				03/26/13 11:40	03/27/13 20:34	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-19-0-031913

Lab Sample ID: 580-37663-8

Date Collected: 03/19/13 08:55

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.048	0.028	mg/L		03/26/13 11:40	03/27/13 21:27	1
Motor Oil (>C24-C36)	0.052	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 21:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	75		50 - 150				03/26/13 11:40	03/27/13 21:27	1

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Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S4-AU-031913

Lab Sample ID: 580-37663-9

Date Collected: 03/19/13 09:05

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.047	0.028	mg/L		03/26/13 11:40	03/27/13 21:45	1
Motor Oil (>C24-C36)	0.049	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 21:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				03/26/13 11:40	03/27/13 21:45	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S3-CU-031913

Lab Sample ID: 580-37663-10

Date Collected: 03/19/13 09:57

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.047	0.028	mg/L		03/26/13 11:40	03/27/13 22:03	1
Motor Oil (>C24-C36)	0.053	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 22:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	61		50 - 150				03/26/13 11:40	03/27/13 22:03	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-18-031913

Lab Sample ID: 580-37663-11

Date Collected: 03/19/13 10:05

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.14	Y	0.049	0.028	mg/L		03/26/13 11:40	03/27/13 22:21	1
Motor Oil (>C24-C36)	0.18	B Y	0.098	0.019	mg/L		03/26/13 11:40	03/27/13 22:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				03/26/13 11:40	03/27/13 22:21	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S3-CD-031913

Lab Sample ID: 580-37663-12

Date Collected: 03/19/13 10:15

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.028	J	0.047	0.028	mg/L		03/26/13 11:40	03/27/13 22:39	1
Motor Oil (>C24-C36)	0.054	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 22:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				03/26/13 11:40	03/27/13 22:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S3-AD-031913

Lab Sample ID: 580-37663-13

Date Collected: 03/19/13 10:19

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.047	0.028	mg/L		03/26/13 11:40	03/27/13 22:56	1
Motor Oil (>C24-C36)	0.055	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 22:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				03/26/13 11:40	03/27/13 22:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S3-AU-031913

Lab Sample ID: 580-37663-14

Date Collected: 03/19/13 10:33

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.042	J	0.048	0.028	mg/L		03/26/13 11:40	03/27/13 23:14	1
Motor Oil (>C24-C36)	0.080	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 23:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				03/26/13 11:40	03/27/13 23:14	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S3-BU-031913

Lab Sample ID: 580-37663-15

Date Collected: 03/19/13 10:38

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.030	J	0.047	0.028	mg/L		03/26/13 11:40	03/27/13 23:32	1
Motor Oil (>C24-C36)	0.061	J B	0.095	0.019	mg/L		03/26/13 11:40	03/27/13 23:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				03/26/13 11:40	03/27/13 23:32	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-16-031913

Lab Sample ID: 580-37663-16

Date Collected: 03/19/13 10:40

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.038	J	0.049	0.029	mg/L		03/26/13 11:40	03/27/13 23:50	1
Motor Oil (>C24-C36)	0.063	J B	0.098	0.019	mg/L		03/26/13 11:40	03/27/13 23:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				03/26/13 11:40	03/27/13 23:50	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S3-BD-031913

Lab Sample ID: 580-37663-17

Date Collected: 03/19/13 10:52

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.047	0.028	mg/L		03/26/13 11:40	03/28/13 00:08	1
Motor Oil (>C24-C36)	0.049	J B	0.095	0.019	mg/L		03/26/13 11:40	03/28/13 00:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	61		50 - 150				03/26/13 11:40	03/28/13 00:08	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S2-BU-031913

Lab Sample ID: 580-37663-18

Date Collected: 03/19/13 11:30

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.037	J	0.047	0.028	mg/L		03/26/13 11:40	03/28/13 01:01	1
Motor Oil (>C24-C36)	0.057	J B	0.095	0.019	mg/L		03/26/13 11:40	03/28/13 01:01	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	79		50 - 150				03/26/13 11:40	03/28/13 01:01	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-17-031913

Lab Sample ID: 580-37663-19

Date Collected: 03/19/13 11:30

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.048	0.028	mg/L		03/26/13 11:40	03/28/13 01:19	1
Motor Oil (>C24-C36)	0.057	J B	0.096	0.019	mg/L		03/26/13 11:40	03/28/13 01:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	76		50 - 150				03/26/13 11:40	03/28/13 01:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2S-AU-031913

Lab Sample ID: 580-37663-20

Date Collected: 03/19/13 11:33

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.047	0.028	mg/L		03/26/13 11:40	03/28/13 01:37	1
Motor Oil (>C24-C36)	0.051	J B	0.095	0.019	mg/L		03/26/13 11:40	03/28/13 01:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				03/26/13 11:40	03/28/13 01:37	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2S-AD-031913

Lab Sample ID: 580-37663-21

Date Collected: 03/19/13 11:44

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.031	J	0.048	0.028	mg/L		03/28/13 10:42	04/01/13 12:56	1
Motor Oil (>C24-C36)	0.056	J B	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 12:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				03/28/13 10:42	04/01/13 12:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S2-BD-031913

Lab Sample ID: 580-37663-22

Date Collected: 03/19/13 11:45

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.035	J	0.047	0.028	mg/L		03/28/13 10:42	04/01/13 13:14	1
Motor Oil (>C24-C36)	0.053	J B	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				03/28/13 10:42	04/01/13 13:14	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S1-AU-031913

Lab Sample ID: 580-37663-23

Date Collected: 03/19/13 12:17

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.047	0.028	mg/L		03/28/13 10:42	04/01/13 13:32	1
Motor Oil (>C24-C36)	0.048	J B	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 13:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				03/28/13 10:42	04/01/13 13:32	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S1-BU-031913

Lab Sample ID: 580-37663-24

Date Collected: 03/19/13 12:21

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.047	0.028	mg/L		03/28/13 10:42	04/01/13 13:50	1
Motor Oil (>C24-C36)	0.049	J B	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 13:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				03/28/13 10:42	04/01/13 13:50	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S1-AD-031913

Lab Sample ID: 580-37663-25

Date Collected: 03/19/13 12:30

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.033	J	0.047	0.028	mg/L		03/28/13 10:42	04/01/13 14:08	1
Motor Oil (>C24-C36)	0.051	J B	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 14:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				03/28/13 10:42	04/01/13 14:08	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S1-BD-031913

Lab Sample ID: 580-37663-26

Date Collected: 03/19/13 12:30

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.039	J	0.047	0.028	mg/L		03/28/13 10:42	04/01/13 14:26	1
Motor Oil (>C24-C36)	0.059	J B	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 14:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				03/28/13 10:42	04/01/13 14:26	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-15-031913

Lab Sample ID: 580-37663-27

Date Collected: 03/19/13 13:05

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.48	Y	0.048	0.028	mg/L		03/28/13 10:42	04/01/13 14:44	1
Motor Oil (>C24-C36)	0.35	B Y	0.097	0.019	mg/L		03/28/13 10:42	04/01/13 14:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				03/28/13 10:42	04/01/13 14:44	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-14-031913

Lab Sample ID: 580-37663-28

Date Collected: 03/19/13 13:50

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.035	J B	0.048	0.028	mg/L		03/28/13 10:42	04/01/13 15:38	1
Motor Oil (>C24-C36)	0.052	J B	0.097	0.019	mg/L		03/28/13 10:42	04/01/13 15:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				03/28/13 10:42	04/01/13 15:38	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: MW-38R-031913

Lab Sample ID: 580-37663-29

Date Collected: 03/19/13 14:45

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	B Y	0.048	0.028	mg/L		03/28/13 10:42	04/01/13 15:56	1
Motor Oil (>C24-C36)	0.13	B Y	0.097	0.019	mg/L		03/28/13 10:42	04/01/13 15:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				03/28/13 10:42	04/01/13 15:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: MW-4-031913

Lab Sample ID: 580-37663-30

Date Collected: 03/19/13 14:50

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	B Y	0.047	0.028	mg/L		03/28/13 10:42	04/01/13 16:13	1
Motor Oil (>C24-C36)	0.30	B Y	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 16:13	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	80		50 - 150				03/28/13 10:42	04/01/13 16:13	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2A-W-9-031913

Lab Sample ID: 580-37663-31

Date Collected: 03/19/13 15:00

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.78	B Y	0.047	0.028	mg/L		03/28/13 10:42	04/01/13 16:31	1
Motor Oil (>C24-C36)	0.59	B Y	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 16:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				03/28/13 10:42	04/01/13 16:31	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-55-031913

Lab Sample ID: 580-37663-32

Date Collected: 03/19/13 15:35

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.055	B Y	0.048	0.028	mg/L		03/28/13 10:42	04/01/13 16:49	1
Motor Oil (>C24-C36)	0.10	B Y	0.096	0.019	mg/L		03/28/13 10:42	04/01/13 16:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				03/28/13 10:42	04/01/13 16:49	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: MW-3-031913

Lab Sample ID: 580-37663-33

Date Collected: 03/19/13 15:55

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.060	B Y	0.047	0.028	mg/L		03/28/13 10:42	04/01/13 17:07	1
Motor Oil (>C24-C36)	0.10	B Y	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 17:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				03/28/13 10:42	04/01/13 17:07	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2A-W-10-031913

Lab Sample ID: 580-37663-34

Date Collected: 03/19/13 16:00

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.23	B Y	0.047	0.028	mg/L		03/28/13 10:42	04/01/13 17:25	1
Motor Oil (>C24-C36)	0.75	B Y	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 17:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				03/28/13 10:42	04/01/13 17:25	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-54-031913

Lab Sample ID: 580-37663-35

Date Collected: 03/19/13 16:35

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.059	B Y	0.048	0.028	mg/L		03/28/13 10:42	04/01/13 17:43	1
Motor Oil (>C24-C36)	0.098	B Y	0.096	0.019	mg/L		03/28/13 10:42	04/01/13 17:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				03/28/13 10:42	04/01/13 17:43	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 540-AD-031913

Lab Sample ID: 580-37663-36

Date Collected: 03/19/13 16:59

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.051	B Y	0.047	0.028	mg/L		03/28/13 10:42	04/01/13 18:01	1
Motor Oil (>C24-C36)	0.077	J B	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 18:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				03/28/13 10:42	04/01/13 18:01	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2B-W-4-031913

Lab Sample ID: 580-37663-37

Date Collected: 03/19/13 17:04

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.042	J B	0.048	0.028	mg/L		03/28/13 10:42	04/01/13 18:19	1
Motor Oil (>C24-C36)	0.082	J B	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				03/28/13 10:42	04/01/13 18:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: MW-16-031913

Lab Sample ID: 580-37663-38

Date Collected: 03/19/13 18:00

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.046	J B	0.047	0.028	mg/L		03/28/13 10:42	04/01/13 19:12	1
Motor Oil (>C24-C36)	0.075	J B	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 19:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				03/28/13 10:42	04/01/13 19:12	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-50-031913

Lab Sample ID: 580-37663-39

Date Collected: 03/19/13 18:29

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	1.1	B Y	0.048	0.028	mg/L		03/28/13 10:42	04/01/13 19:30	1
Motor Oil (>C24-C36)	0.86	B Y	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 19:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				03/28/13 10:42	04/01/13 19:30	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2A-W-40-031913

Lab Sample ID: 580-37663-40

Date Collected: 03/19/13 18:50

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.051	B Y	0.047	0.028	mg/L		03/28/13 10:42	04/01/13 19:48	1
Motor Oil (>C24-C36)	0.11	B Y	0.095	0.019	mg/L		03/28/13 10:42	04/01/13 19:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				03/28/13 10:42	04/01/13 19:48	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-56-031913

Lab Sample ID: 580-37663-41

Date Collected: 03/19/13 19:26

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.095	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/01/13 12:56	1
Motor Oil (>C24-C36)	0.19	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/01/13 12:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				03/28/13 13:05	04/01/13 12:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: GW-2-031913

Lab Sample ID: 580-37663-42

Date Collected: 03/19/13 19:40

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/01/13 13:14	1
Motor Oil (>C24-C36)	0.14	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/01/13 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				03/28/13 13:05	04/01/13 13:14	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2A-W-420-032013

Lab Sample ID: 580-37663-43

Date Collected: 03/20/13 01:11

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.44	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/01/13 13:32	1
Motor Oil (>C24-C36)	0.67	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/01/13 13:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				03/28/13 13:05	04/01/13 13:32	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: GW-1-032013

Lab Sample ID: 580-37663-44

Date Collected: 03/20/13 09:20

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.13	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/01/13 13:50	1
Motor Oil (>C24-C36)	0.22	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/01/13 13:50	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	76		50 - 150				03/28/13 13:05	04/01/13 13:50	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1A-W-4-032013

Lab Sample ID: 580-37663-45

Date Collected: 03/20/13 09:40

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.033	J B	0.048	0.028	mg/L		03/28/13 13:05	04/01/13 14:08	1
Motor Oil (>C24-C36)	0.074	J B	0.096	0.019	mg/L		03/28/13 13:05	04/01/13 14:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				03/28/13 13:05	04/01/13 14:08	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: EW-1-032013

Lab Sample ID: 580-37663-46

Date Collected: 03/20/13 09:30

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.065	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/01/13 14:26	1
Motor Oil (>C24-C36)	0.14	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/01/13 14:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				03/28/13 13:05	04/01/13 14:26	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1B-W-23-032013

Lab Sample ID: 580-37663-47

Date Collected: 03/20/13 10:24

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.083	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/01/13 14:44	1
Motor Oil (>C24-C36)	0.12	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/01/13 14:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				03/28/13 13:05	04/01/13 14:44	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2-A-41-302013

Lab Sample ID: 580-37663-48

Date Collected: 03/20/13 10:25

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.095	B Y	0.048	0.028	mg/L		03/28/13 13:05	04/02/13 13:52	1
Motor Oil (>C24-C36)	0.13	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/02/13 13:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				03/28/13 13:05	04/02/13 13:52	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1B-W-3-032013

Lab Sample ID: 580-37663-49

Date Collected: 03/20/13 11:40

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.071	B Y	0.051	0.030	mg/L		03/28/13 13:05	04/02/13 14:10	1
Motor Oil (>C24-C36)	0.12	B Y	0.10	0.020	mg/L		03/28/13 13:05	04/02/13 14:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				03/28/13 13:05	04/02/13 14:10	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: GW-3-032013

Lab Sample ID: 580-37663-50

Date Collected: 03/20/13 12:00

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.074	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/02/13 14:28	1
Motor Oil (>C24-C36)	0.11	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/02/13 14:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				03/28/13 13:05	04/02/13 14:28	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2A-W-42-032013

Lab Sample ID: 580-37663-51

Date Collected: 03/20/13 12:01

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.42	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/02/13 14:46	1
Motor Oil (>C24-C36)	0.60	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/02/13 14:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	86		50 - 150				03/28/13 13:05	04/02/13 14:46	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1B-W-2-032013

Lab Sample ID: 580-37663-52

Date Collected: 03/20/13 12:40

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11	B Y	0.049	0.029	mg/L		03/28/13 13:05	04/02/13 15:03	1
Motor Oil (>C24-C36)	0.32	B Y	0.098	0.019	mg/L		03/28/13 13:05	04/02/13 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				03/28/13 13:05	04/02/13 15:03	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: GW-4-032013

Lab Sample ID: 580-37663-53

Date Collected: 03/20/13 13:00

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.15	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/02/13 15:21	1
Motor Oil (>C24-C36)	0.32	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/02/13 15:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				03/28/13 13:05	04/02/13 15:21	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: EW-A2-032013

Lab Sample ID: 580-37663-54

Date Collected: 03/20/13 13:22

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10	B Y	0.048	0.028	mg/L		03/28/13 13:05	04/02/13 15:39	1
Motor Oil (>C24-C36)	0.21	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/02/13 15:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				03/28/13 13:05	04/02/13 15:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1C-W-3-032013

Lab Sample ID: 580-37663-55

Date Collected: 03/20/13 14:05

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.050	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/02/13 15:57	1
Motor Oil (>C24-C36)	0.11	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/02/13 15:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				03/28/13 13:05	04/02/13 15:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1C-W-4-032013

Lab Sample ID: 580-37663-56

Date Collected: 03/20/13 14:15

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.46	B Y	0.049	0.029	mg/L		03/28/13 13:05	04/02/13 16:15	1
Motor Oil (>C24-C36)	0.35	B Y	0.098	0.019	mg/L		03/28/13 13:05	04/02/13 16:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				03/28/13 13:05	04/02/13 16:15	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1B-W-230-032013

Lab Sample ID: 580-37663-57

Date Collected: 03/20/13 19:59

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.089	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/02/13 16:32	1
Motor Oil (>C24-C36)	0.12	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/02/13 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				03/28/13 13:05	04/02/13 16:32	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1C-W-7-032113

Lab Sample ID: 580-37663-58

Date Collected: 03/21/13 09:50

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.24	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/02/13 17:26	1
Motor Oil (>C24-C36)	0.20	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/02/13 17:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				03/28/13 13:05	04/02/13 17:26	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1C-W-70-032113

Lab Sample ID: 580-37663-59

Date Collected: 03/21/13 19:54

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.28	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/02/13 17:44	1
Motor Oil (>C24-C36)	0.24	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/02/13 17:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				03/28/13 13:05	04/02/13 17:44	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1C-W-8-032113

Lab Sample ID: 580-37663-60

Date Collected: 03/21/13 10:29

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.30	B Y	0.047	0.028	mg/L		03/28/13 13:05	04/02/13 18:02	1
Motor Oil (>C24-C36)	0.32	B Y	0.095	0.019	mg/L		03/28/13 13:05	04/02/13 18:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				03/28/13 13:05	04/02/13 18:02	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1C-W-1-032113

Lab Sample ID: 580-37663-61

Date Collected: 03/21/13 11:00

Matrix: Water

Date Received: 03/22/13 15:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.056	B Y	0.047	0.028	mg/L		03/28/13 14:35	04/01/13 16:34	1
Motor Oil (>C24-C36)	0.066	J B	0.095	0.019	mg/L		03/28/13 14:35	04/01/13 16:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				03/28/13 14:35	04/01/13 16:34	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-132436/1-A

Matrix: Water

Analysis Batch: 132527

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 132436

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.050	0.029	mg/L		03/26/13 11:40	03/27/13 17:53	1
Motor Oil (>C24-C36)	0.0670	J	0.10	0.020	mg/L		03/26/13 11:40	03/27/13 17:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150	03/26/13 11:40	03/27/13 17:53	1

Lab Sample ID: LCS 580-132436/2-A

Matrix: Water

Analysis Batch: 132527

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 132436

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	5.00	3.93		mg/L		79	70 - 140
Motor Oil (>C24-C36)	5.00	4.50		mg/L		90	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	86		50 - 150

Lab Sample ID: LCSD 580-132436/3-A

Matrix: Water

Analysis Batch: 132527

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 132436

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	5.00	3.92		mg/L		78	70 - 140	0	27
Motor Oil (>C24-C36)	5.00	4.40		mg/L		88	66 - 125	2	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	84		50 - 150

Lab Sample ID: MB 580-132610/1-A

Matrix: Water

Analysis Batch: 132767

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 132610

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.050	0.029	mg/L		03/28/13 10:42	04/01/13 12:03	1
Motor Oil (>C24-C36)	0.0408	J	0.10	0.020	mg/L		03/28/13 10:42	04/01/13 12:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150	03/28/13 10:42	04/01/13 12:03	1

Lab Sample ID: LCS 580-132610/2-A

Matrix: Water

Analysis Batch: 132767

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 132610

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	1.00	0.808		mg/L		81	70 - 140
Motor Oil (>C24-C36)	1.00	0.938		mg/L		94	66 - 125

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-132610/2-A

Matrix: Water

Analysis Batch: 132767

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 132610

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	78		50 - 150

Lab Sample ID: LCSD 580-132610/3-A

Matrix: Water

Analysis Batch: 132767

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 132610

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	1.00	0.885		mg/L		88	70 - 140	9	27
Motor Oil (>C24-C36)	1.00	1.04		mg/L		104	66 - 125	10	27

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	79		50 - 150

Lab Sample ID: MB 580-132623/1-A

Matrix: Water

Analysis Batch: 132770

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 132623

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.0337	J	0.050	0.029	mg/L		03/28/13 13:05	04/01/13 12:03	1
Motor Oil (>C24-C36)	0.0531	J	0.10	0.020	mg/L		03/28/13 13:05	04/01/13 12:03	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
<i>o</i> -Terphenyl	73		50 - 150	03/28/13 13:05	04/01/13 12:03	1			

Lab Sample ID: LCS 580-132623/2-A

Matrix: Water

Analysis Batch: 132770

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 132623

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	1.00	0.829		mg/L		83	70 - 140
Motor Oil (>C24-C36)	1.00	1.02		mg/L		102	66 - 125

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	83		50 - 150

Lab Sample ID: LCSD 580-132623/3-A

Matrix: Water

Analysis Batch: 132770

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 132623

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	1.00	0.840		mg/L		84	70 - 140	1	27
Motor Oil (>C24-C36)	1.00	1.04		mg/L		104	66 - 125	2	27

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	83		50 - 150

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 580-132637/1-A

Matrix: Water

Analysis Batch: 132764

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 132637

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.0351	J	0.050	0.029	mg/L		03/28/13 14:35	04/01/13 14:57	1
Motor Oil (>C24-C36)	0.0447	J	0.10	0.020	mg/L		03/28/13 14:35	04/01/13 14:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150	03/28/13 14:35	04/01/13 14:57	1

Lab Sample ID: LCS 580-132637/2-A

Matrix: Water

Analysis Batch: 132764

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 132637

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	1.00	0.831		mg/L		83	70 - 140
Motor Oil (>C24-C36)	1.00	0.976		mg/L		98	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	85		50 - 150

Lab Sample ID: LCSD 580-132637/3-A

Matrix: Water

Analysis Batch: 132764

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 132637

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	1.00	0.871		mg/L		87	70 - 140	5	27
Motor Oil (>C24-C36)	1.00	0.978		mg/L		98	66 - 125	0	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	83		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: MW-30-0319 13

Lab Sample ID: 580-37663-1

Date Collected: 03/19/13 19:59

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 18:47	JL	TAL SEA

Client Sample ID: S4-CD-031913

Lab Sample ID: 580-37663-2

Date Collected: 03/19/13 08:23

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 19:05	JL	TAL SEA

Client Sample ID: S4-CU-031913

Lab Sample ID: 580-37663-3

Date Collected: 03/19/13 08:26

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 19:22	JL	TAL SEA

Client Sample ID: S4-BD-031913

Lab Sample ID: 580-37663-4

Date Collected: 03/19/13 08:36

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 19:40	JL	TAL SEA

Client Sample ID: S4-BU-031913

Lab Sample ID: 580-37663-5

Date Collected: 03/19/13 08:47

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 19:58	JL	TAL SEA

Client Sample ID: S4-AD-031913

Lab Sample ID: 580-37663-6

Date Collected: 03/19/13 08:53

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 20:16	JL	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-19-031913

Lab Sample ID: 580-37663-7

Date Collected: 03/19/13 08:55

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 20:34	JL	TAL SEA

Client Sample ID: 5-W-19-0-031913

Lab Sample ID: 580-37663-8

Date Collected: 03/19/13 08:55

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 21:27	JL	TAL SEA

Client Sample ID: S4-AU-031913

Lab Sample ID: 580-37663-9

Date Collected: 03/19/13 09:05

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 21:45	JL	TAL SEA

Client Sample ID: S3-CU-031913

Lab Sample ID: 580-37663-10

Date Collected: 03/19/13 09:57

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 22:03	JL	TAL SEA

Client Sample ID: 5-W-18-031913

Lab Sample ID: 580-37663-11

Date Collected: 03/19/13 10:05

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 22:21	JL	TAL SEA

Client Sample ID: S3-CD-031913

Lab Sample ID: 580-37663-12

Date Collected: 03/19/13 10:15

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 22:39	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S3-AD-031913

Lab Sample ID: 580-37663-13

Date Collected: 03/19/13 10:19

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 22:56	JL	TAL SEA

Client Sample ID: S3-AU-031913

Lab Sample ID: 580-37663-14

Date Collected: 03/19/13 10:33

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 23:14	JL	TAL SEA

Client Sample ID: S3-BU-031913

Lab Sample ID: 580-37663-15

Date Collected: 03/19/13 10:38

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 23:32	JL	TAL SEA

Client Sample ID: 5-W-16-031913

Lab Sample ID: 580-37663-16

Date Collected: 03/19/13 10:40

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/27/13 23:50	JL	TAL SEA

Client Sample ID: S3-BD-031913

Lab Sample ID: 580-37663-17

Date Collected: 03/19/13 10:52

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/28/13 00:08	JL	TAL SEA

Client Sample ID: S2-BU-031913

Lab Sample ID: 580-37663-18

Date Collected: 03/19/13 11:30

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/28/13 01:01	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 5-W-17-031913

Lab Sample ID: 580-37663-19

Date Collected: 03/19/13 11:30

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/28/13 01:19	JL	TAL SEA

Client Sample ID: 2S-AU-031913

Lab Sample ID: 580-37663-20

Date Collected: 03/19/13 11:33

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132436	03/26/13 11:40	RS	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132527	03/28/13 01:37	JL	TAL SEA

Client Sample ID: 2S-AD-031913

Lab Sample ID: 580-37663-21

Date Collected: 03/19/13 11:44

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 12:56	JL	TAL SEA

Client Sample ID: S2-BD-031913

Lab Sample ID: 580-37663-22

Date Collected: 03/19/13 11:45

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 13:14	JL	TAL SEA

Client Sample ID: S1-AU-031913

Lab Sample ID: 580-37663-23

Date Collected: 03/19/13 12:17

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 13:32	JL	TAL SEA

Client Sample ID: S1-BU-031913

Lab Sample ID: 580-37663-24

Date Collected: 03/19/13 12:21

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 13:50	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: S1-AD-031913

Lab Sample ID: 580-37663-25

Date Collected: 03/19/13 12:30

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 14:08	JL	TAL SEA

Client Sample ID: S1-BD-031913

Lab Sample ID: 580-37663-26

Date Collected: 03/19/13 12:30

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 14:26	JL	TAL SEA

Client Sample ID: 5-W-15-031913

Lab Sample ID: 580-37663-27

Date Collected: 03/19/13 13:05

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 14:44	JL	TAL SEA

Client Sample ID: 5-W-14-031913

Lab Sample ID: 580-37663-28

Date Collected: 03/19/13 13:50

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 15:38	JL	TAL SEA

Client Sample ID: MW-38R-031913

Lab Sample ID: 580-37663-29

Date Collected: 03/19/13 14:45

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 15:56	JL	TAL SEA

Client Sample ID: MW-4-031913

Lab Sample ID: 580-37663-30

Date Collected: 03/19/13 14:50

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 16:13	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2A-W-9-031913

Lab Sample ID: 580-37663-31

Date Collected: 03/19/13 15:00

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 16:31	JL	TAL SEA

Client Sample ID: 5-W-55-031913

Lab Sample ID: 580-37663-32

Date Collected: 03/19/13 15:35

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 16:49	JL	TAL SEA

Client Sample ID: MW-3-031913

Lab Sample ID: 580-37663-33

Date Collected: 03/19/13 15:55

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 17:07	JL	TAL SEA

Client Sample ID: 2A-W-10-031913

Lab Sample ID: 580-37663-34

Date Collected: 03/19/13 16:00

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 17:25	JL	TAL SEA

Client Sample ID: 5-W-54-031913

Lab Sample ID: 580-37663-35

Date Collected: 03/19/13 16:35

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 17:43	JL	TAL SEA

Client Sample ID: 540-AD-031913

Lab Sample ID: 580-37663-36

Date Collected: 03/19/13 16:59

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 18:01	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2B-W-4-031913

Lab Sample ID: 580-37663-37

Date Collected: 03/19/13 17:04

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 18:19	JL	TAL SEA

Client Sample ID: MW-16-031913

Lab Sample ID: 580-37663-38

Date Collected: 03/19/13 18:00

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 19:12	JL	TAL SEA

Client Sample ID: 5-W-50-031913

Lab Sample ID: 580-37663-39

Date Collected: 03/19/13 18:29

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 19:30	JL	TAL SEA

Client Sample ID: 2A-W-40-031913

Lab Sample ID: 580-37663-40

Date Collected: 03/19/13 18:50

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132610	03/28/13 10:42	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132767	04/01/13 19:48	JL	TAL SEA

Client Sample ID: 5-W-56-031913

Lab Sample ID: 580-37663-41

Date Collected: 03/19/13 19:26

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132770	04/01/13 12:56	JL	TAL SEA

Client Sample ID: GW-2-031913

Lab Sample ID: 580-37663-42

Date Collected: 03/19/13 19:40

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132770	04/01/13 13:14	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 2A-W-420-032013

Lab Sample ID: 580-37663-43

Date Collected: 03/20/13 01:11

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132770	04/01/13 13:32	JL	TAL SEA

Client Sample ID: GW-1-032013

Lab Sample ID: 580-37663-44

Date Collected: 03/20/13 09:20

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132770	04/01/13 13:50	JL	TAL SEA

Client Sample ID: 1A-W-4-032013

Lab Sample ID: 580-37663-45

Date Collected: 03/20/13 09:40

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132770	04/01/13 14:08	JL	TAL SEA

Client Sample ID: EW-1-032013

Lab Sample ID: 580-37663-46

Date Collected: 03/20/13 09:30

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132770	04/01/13 14:26	JL	TAL SEA

Client Sample ID: 1B-W-23-032013

Lab Sample ID: 580-37663-47

Date Collected: 03/20/13 10:24

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132770	04/01/13 14:44	JL	TAL SEA

Client Sample ID: 2-A-41-302013

Lab Sample ID: 580-37663-48

Date Collected: 03/20/13 10:25

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 13:52	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1B-W-3-032013

Lab Sample ID: 580-37663-49

Date Collected: 03/20/13 11:40

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 14:10	JL	TAL SEA

Client Sample ID: GW-3-032013

Lab Sample ID: 580-37663-50

Date Collected: 03/20/13 12:00

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 14:28	JL	TAL SEA

Client Sample ID: 2A-W-42-032013

Lab Sample ID: 580-37663-51

Date Collected: 03/20/13 12:01

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 14:46	JL	TAL SEA

Client Sample ID: 1B-W-2-032013

Lab Sample ID: 580-37663-52

Date Collected: 03/20/13 12:40

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 15:03	JL	TAL SEA

Client Sample ID: GW-4-032013

Lab Sample ID: 580-37663-53

Date Collected: 03/20/13 13:00

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 15:21	JL	TAL SEA

Client Sample ID: EW-A2-032013

Lab Sample ID: 580-37663-54

Date Collected: 03/20/13 13:22

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 15:39	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1C-W-3-032013

Lab Sample ID: 580-37663-55

Date Collected: 03/20/13 14:05

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 15:57	JL	TAL SEA

Client Sample ID: 1C-W-4-032013

Lab Sample ID: 580-37663-56

Date Collected: 03/20/13 14:15

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 16:15	JL	TAL SEA

Client Sample ID: 1B-W-230-032013

Lab Sample ID: 580-37663-57

Date Collected: 03/20/13 19:59

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 16:32	JL	TAL SEA

Client Sample ID: 1C-W-7-032113

Lab Sample ID: 580-37663-58

Date Collected: 03/21/13 09:50

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 17:26	JL	TAL SEA

Client Sample ID: 1C-W-70-032113

Lab Sample ID: 580-37663-59

Date Collected: 03/21/13 19:54

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 17:44	JL	TAL SEA

Client Sample ID: 1C-W-8-032113

Lab Sample ID: 580-37663-60

Date Collected: 03/21/13 10:29

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132623	03/28/13 13:05	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132853	04/02/13 18:02	JL	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Client Sample ID: 1C-W-1-032113

Lab Sample ID: 580-37663-61

Date Collected: 03/21/13 11:00

Matrix: Water

Date Received: 03/22/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			132637	03/28/13 14:35	AC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	132764	04/01/13 16:34	JL	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	06-19-13
L-A-B	ISO/IEC 17025		L2236	06-19-13
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-37663-1	MW-30-0319 13	Water	03/19/13 19:59	03/22/13 15:25
580-37663-2	S4-CD-031913	Water	03/19/13 08:23	03/22/13 15:25
580-37663-3	S4-CU-031913	Water	03/19/13 08:26	03/22/13 15:25
580-37663-4	S4-BD-031913	Water	03/19/13 08:36	03/22/13 15:25
580-37663-5	S4-BU-031913	Water	03/19/13 08:47	03/22/13 15:25
580-37663-6	S4-AD-031913	Water	03/19/13 08:53	03/22/13 15:25
580-37663-7	5-W-19-031913	Water	03/19/13 08:55	03/22/13 15:25
580-37663-8	5-W-19-0-031913	Water	03/19/13 08:55	03/22/13 15:25
580-37663-9	S4-AU-031913	Water	03/19/13 09:05	03/22/13 15:25
580-37663-10	S3-CU-031913	Water	03/19/13 09:57	03/22/13 15:25
580-37663-11	5-W-18-031913	Water	03/19/13 10:05	03/22/13 15:25
580-37663-12	S3-CD-031913	Water	03/19/13 10:15	03/22/13 15:25
580-37663-13	S3-AD-031913	Water	03/19/13 10:19	03/22/13 15:25
580-37663-14	S3-AU-031913	Water	03/19/13 10:33	03/22/13 15:25
580-37663-15	S3-BU-031913	Water	03/19/13 10:38	03/22/13 15:25
580-37663-16	5-W-16-031913	Water	03/19/13 10:40	03/22/13 15:25
580-37663-17	S3-BD-031913	Water	03/19/13 10:52	03/22/13 15:25
580-37663-18	S2-BU-031913	Water	03/19/13 11:30	03/22/13 15:25
580-37663-19	5-W-17-031913	Water	03/19/13 11:30	03/22/13 15:25
580-37663-20	2S-AU-031913	Water	03/19/13 11:33	03/22/13 15:25
580-37663-21	2S-AD-031913	Water	03/19/13 11:44	03/22/13 15:25
580-37663-22	S2-BD-031913	Water	03/19/13 11:45	03/22/13 15:25
580-37663-23	S1-AU-031913	Water	03/19/13 12:17	03/22/13 15:25
580-37663-24	S1-BU-031913	Water	03/19/13 12:21	03/22/13 15:25
580-37663-25	S1-AD-031913	Water	03/19/13 12:30	03/22/13 15:25
580-37663-26	S1-BD-031913	Water	03/19/13 12:30	03/22/13 15:25
580-37663-27	5-W-15-031913	Water	03/19/13 13:05	03/22/13 15:25
580-37663-28	5-W-14-031913	Water	03/19/13 13:50	03/22/13 15:25
580-37663-29	MW-38R-031913	Water	03/19/13 14:45	03/22/13 15:25
580-37663-30	MW-4-031913	Water	03/19/13 14:50	03/22/13 15:25
580-37663-31	2A-W-9-031913	Water	03/19/13 15:00	03/22/13 15:25
580-37663-32	5-W-55-031913	Water	03/19/13 15:35	03/22/13 15:25
580-37663-33	MW-3-031913	Water	03/19/13 15:55	03/22/13 15:25
580-37663-34	2A-W-10-031913	Water	03/19/13 16:00	03/22/13 15:25
580-37663-35	5-W-54-031913	Water	03/19/13 16:35	03/22/13 15:25
580-37663-36	540-AD-031913	Water	03/19/13 16:59	03/22/13 15:25
580-37663-37	2B-W-4-031913	Water	03/19/13 17:04	03/22/13 15:25
580-37663-38	MW-16-031913	Water	03/19/13 18:00	03/22/13 15:25
580-37663-39	5-W-50-031913	Water	03/19/13 18:29	03/22/13 15:25
580-37663-40	2A-W-40-031913	Water	03/19/13 18:50	03/22/13 15:25
580-37663-41	5-W-56-031913	Water	03/19/13 19:26	03/22/13 15:25
580-37663-42	GW-2-031913	Water	03/19/13 19:40	03/22/13 15:25
580-37663-43	2A-W-420-032013	Water	03/20/13 01:11	03/22/13 15:25
580-37663-44	GW-1-032013	Water	03/20/13 09:20	03/22/13 15:25
580-37663-45	1A-W-4-032013	Water	03/20/13 09:40	03/22/13 15:25
580-37663-46	EW-1-032013	Water	03/20/13 09:30	03/22/13 15:25
580-37663-47	1B-W-23-032013	Water	03/20/13 10:24	03/22/13 15:25
580-37663-48	2-A-41-302013	Water	03/20/13 10:25	03/22/13 15:25
580-37663-49	1B-W-3-032013	Water	03/20/13 11:40	03/22/13 15:25
580-37663-50	GW-3-032013	Water	03/20/13 12:00	03/22/13 15:25
580-37663-51	2A-W-42-032013	Water	03/20/13 12:01	03/22/13 15:25
580-37663-52	1B-W-2-032013	Water	03/20/13 12:40	03/22/13 15:25
580-37663-53	GW-4-032013	Water	03/20/13 13:00	03/22/13 15:25

TestAmerica Seattle

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-37663-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-37663-54	EW-A2-032013	Water	03/20/13 13:22	03/22/13 15:25
580-37663-55	1C-W-3-032013	Water	03/20/13 14:05	03/22/13 15:25
580-37663-56	1C-W-4-032013	Water	03/20/13 14:15	03/22/13 15:25
580-37663-57	1B-W-230-032013	Water	03/20/13 19:59	03/22/13 15:25
580-37663-58	1C-W-7-032113	Water	03/21/13 09:50	03/22/13 15:25
580-37663-59	1C-W-70-032113	Water	03/21/13 19:54	03/22/13 15:25
580-37663-60	1C-W-8-032113	Water	03/21/13 10:29	03/22/13 15:25
580-37663-61	1C-W-1-032113	Water	03/21/13 11:00	03/22/13 15:25





CHAIN OF CUSTODY

LABORATORY INFORMATION
 Laboratory: _____
 Address: _____
 City/State/Zip: _____
 Project Manager: _____
 Phone: _____
 Fax: _____

LAB WORK ORDER: 37663

SHIPMENT INFORMATION
 Shipment Method: _____
 Tracking Number: _____

BNSF PROJECT INFORMATION
 BNSF Project Number: _____
 Project City: SKYKOMISH
 Project State of Origin: WA
 BNSF Project Name: BNSF SKYKOMISH GROUND WATER
 BNSF Work Order No.: _____

CONSULTANT INFORMATION
 Company: FARALLON CONSULTING
 Address: 975 5TH AVE NW
 City/State/Zip: ISSAQUAH, WA 98027
 Project Manager: JERRY PORTELE
 Email: JPORTELE@FARALLONCONSULTING.COM
 Phone: 425-275-0800
 Fax: 425-295-0850

TURNAROUND TIME
 1-day Rush
 2-day Rush
 3-day Rush
 5- to 8-day Rush
 Standard 10-Day
 Other: _____

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV
 EDD Req. Format?
 Other Deliverables?

METHODS FOR ANALYSIS

Sample Identification	Containers	Sample Collection			Filtered (Comp/Grab)	Type (Grab)	Matrix	NUTPH-Dx	COMMENTS	LAB USE
		Date	Time	Sampler						
1. S4-CD-031913	2	3/19/13	0823	DK	N	GLB	W		2	
2. S4-CU-031913			0826	RL					3	
3. S4-BD-031913			0836	DK					4	
4. S4-BU-031913			0847	RL					5	
5. S4-AD-031913			0853	DK					6	
6. S-W-19-031913			0855	AS					7	
7. S-W-19-0-031913			0855	AS					8	
8. S4-WU-031913			0905	RL					9	
9. S3-CU-031913			0957	DK					10	
10. S-W-18-031913			1005	AS					11	
11. S3-CD-031913			1015	DK					12	
12. S3-AD-031913			1019	RL					13	
13. S3-AU-031913			1033	RL					14	
14. S3-BD-031913			1038	DK					15	
15. S-W-16-031913			1040	AS					16	

Relinquished By: _____
 Date/Time: _____

Received By: _____
 Date/Time: 3/21/13 12:40

Relinquished By: _____
 Date/Time: _____

Received By: _____
 Date/Time: 3/21/13 12:40

Relinquished By: _____
 Date/Time: _____

Received By: _____
 Date/Time: _____

Lab Remarks: _____

Lab Custody Intact? Yes No

Custody Seal No.: _____

BNSF COC No.: _____

Comments and Special Analytical Requirements: _____



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: **663-043** Project State of Origin: **WA** Project City: **SKYKOMISH** Company: **FARALLON CONSULTING** Project Manager: **TERRY POTTELE**

BNSF Project Name: **BUSF SKYKOMISH GROUND WATER** Address: **975 5th Ave NW** Email: **T.POTTELE@FARALLONCONSULTING.COM**

BNSF Contact: **BRUCE SHEPARD** BNSF Work Order No.: **ISSAQUAH, WA 98027** Phone: **425 295 0822** Fax: **425 295 0850**

City/State/Zip: **ISSAQUAH, WA 98027** City/State/Zip: **ISSAQUAH, WA 98027** Tracking Number: **37003**

Project Number: **663-043** Project Manager: **TERRY POTTELE**

Shipment Method: **SHIPMENT INFORMATION**

TURNAROUND TIME
 1-day Rush
 5- to 8-day Rush
 2-day Rush
 Standard 10-Day
 3-day Rush
 Other _____

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 EDD Req. Format?
 Level IV
 Other Deliverables?

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler						
53-BD-031913	2	3/19/13	1052	DK	N	GMB	W	X	WTPH - D _x	17
52-BU-031913				DK						18
5-W-17-031913				AS						19
25-WU-031913				RL						20
25-AD-031913				RL						21
52-BD-031913				DK						22
51-AU-031913				DK						23
51-BU-031913				RL						24
51-AD-031913				DK						25
51-BD-031913				RL						26
5-W-15-031913				AS						27
5-W-14-031913				AS						28
MU-3BR-031913				AS						29
MU-4-031913				DK						30
2A-UT-9-031913				RL						31

Relinquished By: *[Signature]* Date/Time: **3/22 12:40** Received By: *[Signature]* Date/Time: **3/22/13 12:40**

Relinquished By: *[Signature]* Date/Time: _____ Received By: _____ Date/Time: _____

Received by Laboratory: _____ Date/Time: _____ Lab Remarks: _____

Comments and Special Analytical Requirements: _____

Lab Custody Intact? Yes No
 Custody Seal No. _____ BNSF COC No. _____

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: **SKYKOMISH**

BNSF Project Name: **BRUCE SHEPARD**

BNSF Contact: **BRUCE SHEPARD**

LABORATORY INFORMATION

Laboratory: **SKYKOMISH**

Address: **GROUND W AREA**

City/State/Zip: **WA**

Project Manager: **ISSAQUAH**

Phone: **CA 98027**

Fax: **CA 98027**

LAB WORK ORDER:

37663

SHIPMENT INFORMATION

Shipment Method: **TRUCK**

Tracking Number: **693-043**

Project Number: **693-043**

Project Manager: **JERRY PORTER**

Address: **770 RTBLE @ FARALLON CONSULTING**

City/State/Zip: **ISSAQUAH WA 98027**

Phone: **(425) 295 0800**

Fax: **(425) 295 0800**

TURNAROUND TIME

1-day Rush

5- to 8-day Rush

2-day Rush

Standard 10-Day

3-day Rush

Other

DELIVERABLES

BNSF Standard (Level II)

Level III

Level IV

Other Deliverables?

METHODS FOR ANALYSIS

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered (Y/N)	Type (Comp/Grab)	Matrix	Comments	Lab Use
		Date	Time	Sampler					
1. 5-W-55-031913	2	3/19/13	1535	AS	N	COB	NWTPH-Dx	32	
2. MW-3-031913			1555	DK				33	
3. 2A-W-10-031913			1600	RL				34	
4. 5-W-54-031913			1635	AS				35	
5. 2. 540-AD-031913			1659	DK				36	
6. 2B-W-4-031913			1704	RL				37	
7. MW-16-031913			1800	DK				38	
8. 5-W-50-031913			1829	RL				39	
9. 2A-W-40-031913			1850	DK				40	
10. 5-W-56-031913			1926	RL				41	
11. 6W-2-031913			1940	DK				42	
12. 2A-W-420-032013		3/20/13	0111	RL				43	
13. 6W-1-032013			0920	RL				44	
14. 1A-W-4-032013			0940	AS				45	
15. EW-1-032013			0930	ADK				46	

Comments and Special Analytical Requirements:

Received by Laboratory: _____ Date/Time: _____ Lab Remarks: _____
 Requisitioned By: _____ Date/Time: _____ Received By: _____
 Requisitioned By: _____ Date/Time: _____ Received By: _____
 Lab Custody Intact? Yes No
 Custody Seal No. _____ BNSF COC No. _____

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

Project City: **SKYKOMISH**

BNSF Project Name: **BUSF SKYKOMISH GROUND WATER**

BNSF Contact: **BRUCE SHEPARD**

Company: **FARALLON CONSULTING**
 Address: **475 5th AVE NEB**
 City/State/Zip: **ISSAQUAH, WA 98027**

Project Manager: **TERRS PORTER**
 Email: **TERRS@FARALLONCONSULTING.COM**
 Phone: **(425) 295-0800** Fax: **425-295-0850**

LABORATORY INFORMATION

Project Manager:

Phone:

Fax:

LAB WORK ORDER:

SHIPMENT INFORMATION

Shipment Method:

Tracking Number:

Project Number: **663-043**

37643

TURNAROUND TIME

1-day Rush
 5- to 8-day Rush
 2-day Rush
 Standard 10-Day
 3-day Rush
 Other _____

DELIVERABLES

BNSF Standard (Level II)
 Level III
 Level IV
 Other Deliverables?

METHODS FOR ANALYSIS

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/ Grad)	Matrix	Comments	LAB USE
		Date	Time	Sampler					
1B-W-23-032013	2	3/20/13	1024	DK	N	GRAB	NTPH-Dx	47	
2-A-41-032013			1025	RL				48	
1B-W-3-032013			1140	AS				49	
GW-3-032013			1200	DK				50	
2A-W-42-032013			1201	RL				51	
1B-W-2-032013			1240	AS				52	
GW-4-032019			1300	DK				53	
EW-A2-032013			1322	RL				54	
1C-W-3-032013			1405	DK				55	
1C-W-4-032013			1415	AS				56	
1B-W-230-032013			1959	DK				57	
12									
13									
14									
15									
16									

Relinquished By: *[Signature]* Date/Time: **3/22/13 12:40** Received By: *[Signature]* Date/Time: **3/22/13 12:40**

Relinquished By: *[Signature]* Date/Time: _____ Received By: *[Signature]* Date/Time: _____

Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____

Received by Laboratory: _____ Date/Time: _____ Lab Remarks: _____

Received by: _____ Date/Time: _____ Lab Remarks: _____

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES DUPLICATE - CONSULTANT

#1
Cooler/TB Dig/IR cor 5.8 uncl 3
Cooler Dsc hydro blue @ Lab 5:15
Wet/Packs Packing be bubble
w/ps

Cooler/TB Dig/IR cor 4.2 uncl 4
Cooler Dsc hydro blue @ Lab
Wet/Packs Packing be bubble
w/ps

Temp black was @ 7.2 - used in instead

#1
Cooler/TB Dig/IR cor 5.25 uncl 10
Cooler Dsc hydro blue @ Lab 5:25
Wet/Packs Packing be bubble
w/ps

#1
Cooler/TB Dig/IR cor 5.2 uncl 7
Cooler Dsc hydro blue @ Lab
Wet/Packs Packing be bubble
w/ps

Lab 15:25

5.96 star
Cooler/TB Dig/IR cor 5.2 uncl 10
Cooler Dsc hydro blue @ Lab
Wet/Packs Packing be bubble
w/ps

#1
Cooler/TB Dig/IR cor 6.0 uncl 5
Cooler Dsc hydro blue @ Lab 5:25
Wet/Packs Packing be bubble
w/ps

#1
Cooler/TB Dig/IR cor 5.2 uncl 1
Cooler Dsc hydro blue @ Lab
Wet/Packs Packing be bubble
w/ps

#1
Cooler/TB Dig/IR cor 8.0 uncl 5
Cooler Dsc hydro blue @ Lab
Wet/Packs Packing be bubble
w/ps

No ice in bag - all water

#1
Cooler/TB Dig/IR cor 5.1 uncl 4
Cooler Dsc hydro blue @ Lab
Wet/Packs Packing be bubble
w/ps

#1
Cooler/TB Dig/IR cor 5.8 uncl 3
Cooler Dsc hydro blue @ Lab
Wet/Packs Packing be bubble
w/ps

Cooler/TB Dig/IR cor 5.9 uncl 10
Cooler Dsc hydro blue @ Lab
Wet/Packs Packing be bubble
w/ps

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-37663-1

Login Number: 37663

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	1 cooler received out of temperature
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	see NCM
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-38258-2

Client Project/Site: BNSF Skykomish Ground Water

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele



Authorized for release by:
5/22/2013 10:24:12 AM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

LINKS

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results through
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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-38258-2

Job ID: 580-38258-2

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 4/30/2013 2:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6° C.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 135469, the method blank for preparation batch 135323 contained Motor Oil (>C24-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 135469, for the following sample(s) from preparation batch 135323: 1C-W-1-042913 (580-38258-1), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 135469, for the following sample(s) from preparation batch 135323: 1C-W-70-042913 (580-38258-4), 1C-W-7-042913 (580-38258-3), 1C-W-8-042913 (580-38258-2), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and motor oil. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-38258-2

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-38258-2

Client Sample ID: 1C-W-1-042913

Lab Sample ID: 580-38258-1

Date Collected: 04/29/13 14:05

Matrix: Water

Date Received: 04/30/13 14:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.058	Y	0.047	0.028	mg/L		05/09/13 11:13	05/13/13 13:07	1
Motor Oil (>C24-C36)	0.072	J B	0.095	0.019	mg/L		05/09/13 11:13	05/13/13 13:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				05/09/13 11:13	05/13/13 13:07	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-38258-2

Client Sample ID: 1C-W-8-042913

Lab Sample ID: 580-38258-2

Date Collected: 04/29/13 14:50

Matrix: Water

Date Received: 04/30/13 14:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.23	Y	0.047	0.028	mg/L		05/09/13 11:13	05/13/13 13:24	1
Motor Oil (>C24-C36)	0.19	B Y	0.095	0.019	mg/L		05/09/13 11:13	05/13/13 13:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	85		50 - 150				05/09/13 11:13	05/13/13 13:24	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-38258-2

Client Sample ID: 1C-W-7-042913

Lab Sample ID: 580-38258-3

Date Collected: 04/29/13 15:25

Matrix: Water

Date Received: 04/30/13 14:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.17	Y	0.047	0.028	mg/L		05/09/13 11:13	05/13/13 13:42	1
Motor Oil (>C24-C36)	0.11	B Y	0.095	0.019	mg/L		05/09/13 11:13	05/13/13 13:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				05/09/13 11:13	05/13/13 13:42	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-38258-2

Client Sample ID: 1C-W-70-042913

Lab Sample ID: 580-38258-4

Date Collected: 04/29/13 15:59

Matrix: Water

Date Received: 04/30/13 14:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.17	Y	0.047	0.028	mg/L		05/09/13 11:13	05/13/13 14:00	1
Motor Oil (>C24-C36)	0.11	B Y	0.095	0.019	mg/L		05/09/13 11:13	05/13/13 14:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				05/09/13 11:13	05/13/13 14:00	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-38258-2

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-135323/1-A

Matrix: Water

Analysis Batch: 135469

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 135323

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.050	0.029	mg/L		05/09/13 11:13	05/13/13 11:21	1
Motor Oil (>C24-C36)	0.0261	J	0.10	0.020	mg/L		05/09/13 11:13	05/13/13 11:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150	05/09/13 11:13	05/13/13 11:21	1

Lab Sample ID: LCS 580-135323/2-A

Matrix: Water

Analysis Batch: 135469

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 135323

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	1.00	0.841		mg/L		84	70 - 140
Motor Oil (>C24-C36)	1.00	0.970		mg/L		97	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	91		50 - 150

Lab Sample ID: LCSD 580-135323/3-A

Matrix: Water

Analysis Batch: 135469

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 135323

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	1.00	0.906		mg/L		91	70 - 140	7	27
Motor Oil (>C24-C36)	1.00	1.03		mg/L		103	66 - 125	6	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	130		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-38258-2

Client Sample ID: 1C-W-1-042913

Lab Sample ID: 580-38258-1

Date Collected: 04/29/13 14:05

Matrix: Water

Date Received: 04/30/13 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			135323	05/09/13 11:13	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	135469	05/13/13 13:07	JL	TAL SEA

Client Sample ID: 1C-W-8-042913

Lab Sample ID: 580-38258-2

Date Collected: 04/29/13 14:50

Matrix: Water

Date Received: 04/30/13 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			135323	05/09/13 11:13	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	135469	05/13/13 13:24	JL	TAL SEA

Client Sample ID: 1C-W-7-042913

Lab Sample ID: 580-38258-3

Date Collected: 04/29/13 15:25

Matrix: Water

Date Received: 04/30/13 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			135323	05/09/13 11:13	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	135469	05/13/13 13:42	JL	TAL SEA

Client Sample ID: 1C-W-70-042913

Lab Sample ID: 580-38258-4

Date Collected: 04/29/13 15:59

Matrix: Water

Date Received: 04/30/13 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			135323	05/09/13 11:13	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	135469	05/13/13 14:00	JL	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-38258-2

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	06-19-13
L-A-B	ISO/IEC 17025		L2236	06-19-13
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-38258-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-38258-1	1C-W-1-042913	Water	04/29/13 14:05	04/30/13 14:15
580-38258-2	1C-W-8-042913	Water	04/29/13 14:50	04/30/13 14:15
580-38258-3	1C-W-7-042913	Water	04/29/13 15:25	04/30/13 14:15
580-38258-4	1C-W-70-042913	Water	04/29/13 15:59	04/30/13 14:15

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CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

Project State of Origin: **WI**
 Project City: **SKYKOMISH**

Company: **FERRALON CONSULTING**
 Address: **975 5TH AVE NW**
 City/State/Zip: **ISSAQUAH, WI 98027**

Project Number: **1083-043**
 Project Manager: **TERREY FORTELE**

BNSF Project Name: **BNSF SKYKOMISH GRAND WHITE**
 BNSF Office: **BRUCE SHERARD**

BNSF Work Order No.: **15399994H, WI 98027**
 Email: **TFORTELE@FERRALONCONSULTING.COM**
 Phone: **425 295 0830**
 Fax: **425 295 0850**

TURNAROUND TIME

1-day Rush
 2-day Rush
 3-day Rush

DELIVERABLES

5- to 8-day Rush
 Standard 10-Day
 Level III
 Level IV
 Other Deliverables?

METHODS FOR ANALYSIS

SAMPLE INFORMATION

Containers	Date	Sample Collection		Filtered Y/N	Type (Comp/Grab)	Matrix	Comments	Lab Use
		Time	Sampler					
1C-W-1-042913	4/29/13	1405	DK	N	G	W		
2 1C-W-8-042913		1450						
3 1C-W-7-042913		1525						
4 1C-W-20-042913		1559						
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								



580-38258 Chain of Custody

Cooler/IB Dig/IR cor 2.6" unc3d
 Cooler Dsc Ly Green/Blue @ Lab 1415
 Wet Packs Packing Babbler
 41 W/O CS

Comments and Special Analytical Requirements:

Requisitioned By: [Signature] Date/Time: 4/30/13 1310
 Requisitioned By: [Signature] Date/Time: 4/30/13 1310
 Received By: [Signature] Date/Time: [Blank]
 Received By: [Signature] Date/Time: [Blank]
 Lab Custody Intact? Yes No
 Custody Seal No. [Blank] BNSF COC No. [Blank]

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

LABORATORY INFORMATION

LAB WORK ORDER

SHIPMENT INFORMATION

30258

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-38258-2

Login Number: 38258

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-38606-1

Client Project/Site: Skykomish Ongoing Cleanup Activities

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele



Authorized for release by:
5/31/2013 2:46:03 PM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish Ongoing Cleanup Activities

TestAmerica Job ID: 580-38606-1

Job ID: 580-38606-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 5/24/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7° C.

GC Semi VOA - Method(s) NWTPH-Dx

in analytical batch 136651, the method blank for preparation batch 136560 contained Motor Oil (>C24-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 136651, for the following sample(s) from preparation batch 136560: 1C-W-70-052113 (580-38606-4), 1C-W-8-052113 (580-38606-2), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and motor oil. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 136651, for the following sample(s) from preparation batch 136560: 1C-W-7-052113 (580-38606-3), the results in the Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of motor oil and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish Ongoing Cleanup Activities

TestAmerica Job ID: 580-38606-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Y	The chromatographic response resembles a typical fuel pattern.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ongoing Cleanup Activities

TestAmerica Job ID: 580-38606-1

Client Sample ID: 1C-W-1-052113

Lab Sample ID: 580-38606-1

Date Collected: 05/21/13 10:33

Matrix: Water

Date Received: 05/24/13 09:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.048	0.028	mg/L		05/28/13 16:12	05/30/13 17:44	1
Motor Oil (>C24-C36)	0.076	J B	0.097	0.019	mg/L		05/28/13 16:12	05/30/13 17:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	97		50 - 150				05/28/13 16:12	05/30/13 17:44	1

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Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ongoing Cleanup Activities

TestAmerica Job ID: 580-38606-1

Client Sample ID: 1C-W-8-052113

Lab Sample ID: 580-38606-2

Date Collected: 05/21/13 11:26

Matrix: Water

Date Received: 05/24/13 09:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16	Y	0.048	0.028	mg/L		05/28/13 16:12	05/30/13 18:01	1
Motor Oil (>C24-C36)	0.16	B Y	0.096	0.019	mg/L		05/28/13 16:12	05/30/13 18:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	98		50 - 150				05/28/13 16:12	05/30/13 18:01	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ongoing Cleanup Activities

TestAmerica Job ID: 580-38606-1

Client Sample ID: 1C-W-7-052113

Lab Sample ID: 580-38606-3

Date Collected: 05/21/13 12:16

Matrix: Water

Date Received: 05/24/13 09:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.048	0.028	mg/L		05/28/13 16:12	05/30/13 18:19	1
Motor Oil (>C24-C36)	0.11	B Y	0.096	0.019	mg/L		05/28/13 16:12	05/30/13 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	93		50 - 150				05/28/13 16:12	05/30/13 18:19	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ongoing Cleanup Activities

TestAmerica Job ID: 580-38606-1

Client Sample ID: 1C-W-70-052113

Lab Sample ID: 580-38606-4

Date Collected: 05/21/13 12:21

Matrix: Water

Date Received: 05/24/13 09:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.051	Y	0.048	0.028	mg/L		05/28/13 16:12	05/30/13 18:37	1
Motor Oil (>C24-C36)	0.10	B Y	0.095	0.019	mg/L		05/28/13 16:12	05/30/13 18:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	94		50 - 150				05/28/13 16:12	05/30/13 18:37	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ongoing Cleanup Activities

TestAmerica Job ID: 580-38606-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-136560/1-A

Matrix: Water

Analysis Batch: 136651

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 136560

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.050	0.029	mg/L		05/28/13 16:12	05/30/13 16:50	1
Motor Oil (>C24-C36)	0.0314	J	0.10	0.020	mg/L		05/28/13 16:12	05/30/13 16:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150	05/28/13 16:12	05/30/13 16:50	1

Lab Sample ID: LCS 580-136560/2-A

Matrix: Water

Analysis Batch: 136651

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 136560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	5.00	3.98		mg/L		80	70 - 140
Motor Oil (>C24-C36)	5.00	4.78		mg/L		96	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	85		50 - 150

Lab Sample ID: LCSD 580-136560/3-A

Matrix: Water

Analysis Batch: 136651

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 136560

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	5.00	4.46		mg/L		89	70 - 140	12	27
Motor Oil (>C24-C36)	5.00	5.55		mg/L		111	66 - 125	15	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	100		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish Ongoing Cleanup Activities

TestAmerica Job ID: 580-38606-1

Client Sample ID: 1C-W-1-052113

Lab Sample ID: 580-38606-1

Date Collected: 05/21/13 10:33

Matrix: Water

Date Received: 05/24/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			136560	05/28/13 16:12	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	136651	05/30/13 17:44	JL	TAL SEA

Client Sample ID: 1C-W-8-052113

Lab Sample ID: 580-38606-2

Date Collected: 05/21/13 11:26

Matrix: Water

Date Received: 05/24/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			136560	05/28/13 16:12	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	136651	05/30/13 18:01	JL	TAL SEA

Client Sample ID: 1C-W-7-052113

Lab Sample ID: 580-38606-3

Date Collected: 05/21/13 12:16

Matrix: Water

Date Received: 05/24/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			136560	05/28/13 16:12	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	136651	05/30/13 18:19	JL	TAL SEA

Client Sample ID: 1C-W-70-052113

Lab Sample ID: 580-38606-4

Date Collected: 05/21/13 12:21

Matrix: Water

Date Received: 05/24/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			136560	05/28/13 16:12	AW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	136651	05/30/13 18:37	JL	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish Ongoing Cleanup Activities

TestAmerica Job ID: 580-38606-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish Ongoing Cleanup Activities

TestAmerica Job ID: 580-38606-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-38606-1	1C-W-1-052113	Water	05/21/13 10:33	05/24/13 09:30
580-38606-2	1C-W-8-052113	Water	05/21/13 11:26	05/24/13 09:30
580-38606-3	1C-W-7-052113	Water	05/21/13 12:16	05/24/13 09:30
580-38606-4	1C-W-70-052113	Water	05/21/13 12:21	05/24/13 09:30

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-38606-1

Login Number: 38606

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-39011-1

Client Project/Site: BNSF Skykomish Groundwater

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele



Authorized for release by:
6/28/2013 4:54:37 PM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

LINKS

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results through
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Job ID: 580-39011-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 6/20/2013 4:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.8° C, 3.7° C, 4.1° C, 4.2° C and 4.2° C.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 138611, the method blank for preparation batch 138415 contained #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 138607, the method blank for preparation batch 138547 contained #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) above the method detection limit. These target analyte range concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 138611, for the following sample(s) from preparation batch 138415: 1C-W-7-061813 (580-39011-12), 2A-W-42-061813 (580-39011-14), 5-W-15-061813 (580-39011-9), 5-W-18-061813 (580-39011-3), 5-W-19-061813 (580-39011-1), EW-1-061813 (580-39011-15), EW-2A-061813 (580-39011-2), GW-1-061813 (580-39011-16), GW-4-061813 (580-39011-4), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered diesel fuel, a mineral/transformer oil range product, motor oil and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 138611, for the following sample(s) from preparation batch 138415: 1C-W-1-061813 (580-39011-8), 5-W-14-061813 (580-39011-13), 5-W-160-061813 (580-39011-6), 5-W-16-061813 (580-39011-5), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a complex mixture of heavily weathered diesel fuel, a mineral/transformer oil range product, motor oil and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 138607, for the following sample(s) from preparation batch 138547: 1B-W-23-061813 (580-39011-20), 1C-W-70-061813 (580-39011-17), 1C-W-8-061813 (580-39011-10), 2A-W-100-061913 (580-39011-27), 2A-W-10-061913 (580-39011-24), 2A-W-41-061913 (580-39011-21), 2A-W-9-061913 (580-39011-23), GW-2-061813 (580-39011-19), MW-3-061913 (580-39011-26), MW-4-061913 (580-39011-25), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel, a mineral/transformer oil range product and motor oil. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 138607, for the following sample(s) from preparation batch 138547: GW-3-061813 (580-39011-18), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel, a mineral/transformer oil range product and motor oil. The affected analyte range(s) have been Y qualified and reported.

The closing continuing calibration verification (CCV) for analytical batch 138611 recovered above the upper control limits for Motor Oil (>C24-C36). The affected samples (CCV 580-138611/29), EW-1-061813 (580-39011-15), GW-1-061813 (580-39011-16) have been re-analyzed within a passing CCV bracket in analytical batch 138727 for the affected analyte range and reported.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
Y	The chromatographic response resembles a typical fuel pattern.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 5-W-19-061813

Lab Sample ID: 580-39011-1

Date Collected: 06/18/13 08:55

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.033	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 12:13	1
Motor Oil (>C24-C36)	0.054	B Y	0.048	0.0095	mg/L		06/24/13 10:29	06/26/13 12:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	91		50 - 150				06/24/13 10:29	06/26/13 12:13	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: EW-2A-061813

Lab Sample ID: 580-39011-2

Date Collected: 06/18/13 09:15

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.031	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 12:31	1
Motor Oil (>C24-C36)	0.058	B Y	0.047	0.0093	mg/L		06/24/13 10:29	06/26/13 12:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				06/24/13 10:29	06/26/13 12:31	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 5-W-18-061813

Lab Sample ID: 580-39011-3

Date Collected: 06/18/13 09:45

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.13	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 12:49	1
Motor Oil (>C24-C36)	0.17	B Y	0.049	0.0095	mg/L		06/24/13 10:29	06/26/13 12:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				06/24/13 10:29	06/26/13 12:49	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: GW-4-061813

Lab Sample ID: 580-39011-4

Date Collected: 06/18/13 10:15

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.034	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 13:43	1
Motor Oil (>C24-C36)	0.062	B Y	0.048	0.0093	mg/L		06/24/13 10:29	06/26/13 13:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	92		50 - 150				06/24/13 10:29	06/26/13 13:43	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 5-W-16-061813

Lab Sample ID: 580-39011-5

Date Collected: 06/18/13 10:30

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.030	B Y	0.025	0.015	mg/L		06/24/13 10:29	06/26/13 14:01	1
Motor Oil (>C24-C36)	0.044	J B	0.050	0.0098	mg/L		06/24/13 10:29	06/26/13 14:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				06/24/13 10:29	06/26/13 14:01	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 5-W-160-061813

Lab Sample ID: 580-39011-6

Date Collected: 06/18/13 10:30

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.028	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 14:18	1
Motor Oil (>C24-C36)	0.040	J B	0.049	0.0095	mg/L		06/24/13 10:29	06/26/13 14:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				06/24/13 10:29	06/26/13 14:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 5-W-17-061813

Lab Sample ID: 580-39011-7

Date Collected: 06/18/13 11:15

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.021	J B	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 14:37	1
Motor Oil (>C24-C36)	0.026	J B	0.048	0.0095	mg/L		06/24/13 10:29	06/26/13 14:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				06/24/13 10:29	06/26/13 14:37	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 1C-W-1-061813

Lab Sample ID: 580-39011-8

Date Collected: 06/18/13 11:25

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.032	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 14:54	1
Motor Oil (>C24-C36)	0.045	J B	0.047	0.0093	mg/L		06/24/13 10:29	06/26/13 14:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				06/24/13 10:29	06/26/13 14:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 5-W-15-061813

Lab Sample ID: 580-39011-9

Date Collected: 06/18/13 12:00

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16	B Y	0.025	0.014	mg/L		06/24/13 10:29	06/26/13 15:12	1
Motor Oil (>C24-C36)	0.19	B Y	0.050	0.0097	mg/L		06/24/13 10:29	06/26/13 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	93		50 - 150				06/24/13 10:29	06/26/13 15:12	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 1C-W-8-061813

Lab Sample ID: 580-39011-10

Date Collected: 06/18/13 12:13

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 18:05	1
Motor Oil (>C24-C36)	0.066	B Y	0.047	0.0093	mg/L		06/25/13 12:56	06/26/13 18:05	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	<i>81</i>		<i>50 - 150</i>				<i>06/25/13 12:56</i>	<i>06/26/13 18:05</i>	<i>1</i>

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 2B-W-4-061813

Lab Sample ID: 580-39011-11

Date Collected: 06/18/13 13:40

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.020	J B	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 15:30	1
Motor Oil (>C24-C36)	0.026	J B	0.048	0.0094	mg/L		06/24/13 10:29	06/26/13 15:30	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	<i>84</i>		<i>50 - 150</i>				<i>06/24/13 10:29</i>	<i>06/26/13 15:30</i>	<i>1</i>



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 1C-W-7-061813

Lab Sample ID: 580-39011-12

Date Collected: 06/18/13 13:59

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.072	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 15:48	1
Motor Oil (>C24-C36)	0.056	B Y	0.047	0.0093	mg/L		06/24/13 10:29	06/26/13 15:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	88		50 - 150				06/24/13 10:29	06/26/13 15:48	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 5-W-14-061813

Lab Sample ID: 580-39011-13

Date Collected: 06/18/13 14:20

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.026	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 16:06	1
Motor Oil (>C24-C36)	0.032	J B	0.048	0.0094	mg/L		06/24/13 10:29	06/26/13 16:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				06/24/13 10:29	06/26/13 16:06	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 2A-W-42-061813

Lab Sample ID: 580-39011-14

Date Collected: 06/18/13 15:00

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 16:24	1
Motor Oil (>C24-C36)	0.10	B Y	0.048	0.0093	mg/L		06/24/13 10:29	06/26/13 16:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				06/24/13 10:29	06/26/13 16:24	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: EW-1-061813

Lab Sample ID: 580-39011-15

Date Collected: 06/18/13 15:00

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.052	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 17:18	1
Motor Oil (>C24-C36)	0.084	B Y	0.048	0.0095	mg/L		06/24/13 10:29	06/27/13 10:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				06/24/13 10:29	06/26/13 17:18	1
<i>o</i> -Terphenyl	98		50 - 150				06/24/13 10:29	06/27/13 10:42	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: GW-1-061813

Lab Sample ID: 580-39011-16

Date Collected: 06/18/13 15:45

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.070	B Y	0.024	0.014	mg/L		06/24/13 10:29	06/26/13 17:36	1
Motor Oil (>C24-C36)	0.12	B Y	0.049	0.0095	mg/L		06/24/13 10:29	06/27/13 11:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				06/24/13 10:29	06/26/13 17:36	1
<i>o</i> -Terphenyl	97		50 - 150				06/24/13 10:29	06/27/13 11:00	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 1C-W-70-061813

Lab Sample ID: 580-39011-17

Date Collected: 06/18/13 16:00

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.056	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 13:47	1
Motor Oil (>C24-C36)	0.055	B Y	0.047	0.0093	mg/L		06/25/13 12:56	06/26/13 13:47	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	<i>87</i>		<i>50 - 150</i>				<i>06/25/13 12:56</i>	<i>06/26/13 13:47</i>	<i>1</i>



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: GW-3-061813

Lab Sample ID: 580-39011-18

Date Collected: 06/18/13 16:07

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.038	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 14:07	1
Motor Oil (>C24-C36)	0.039	J B	0.047	0.0093	mg/L		06/25/13 12:56	06/26/13 14:07	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	<i>90</i>		<i>50 - 150</i>				<i>06/25/13 12:56</i>	<i>06/26/13 14:07</i>	<i>1</i>

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: GW-2-061813

Lab Sample ID: 580-39011-19

Date Collected: 06/18/13 16:30

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.067	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 14:27	1
Motor Oil (>C24-C36)	0.060	B Y	0.048	0.0095	mg/L		06/25/13 12:56	06/26/13 14:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	87		50 - 150				06/25/13 12:56	06/26/13 14:27	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 1B-W-23-061813

Lab Sample ID: 580-39011-20

Date Collected: 06/18/13 16:47

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.061	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 14:46	1
Motor Oil (>C24-C36)	0.10	B Y	0.047	0.0093	mg/L		06/25/13 12:56	06/26/13 14:46	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	87		50 - 150				06/25/13 12:56	06/26/13 14:46	1

- 1
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- 10
- 11

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 2A-W-41-061913

Lab Sample ID: 580-39011-21

Date Collected: 06/19/13 08:48

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.041	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 15:06	1
Motor Oil (>C24-C36)	0.055	B Y	0.048	0.0093	mg/L		06/25/13 12:56	06/26/13 15:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				06/25/13 12:56	06/26/13 15:06	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 2A-W-40-061913

Lab Sample ID: 580-39011-22

Date Collected: 06/19/13 09:53

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.015	J B	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 15:26	1
Motor Oil (>C24-C36)	0.017	J B	0.047	0.0093	mg/L		06/25/13 12:56	06/26/13 15:26	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	78		50 - 150				06/25/13 12:56	06/26/13 15:26	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 2A-W-9-061913

Lab Sample ID: 580-39011-23

Date Collected: 06/19/13 10:53

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 16:26	1
Motor Oil (>C24-C36)	0.10	B Y	0.047	0.0093	mg/L		06/25/13 12:56	06/26/13 16:26	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	83		50 - 150				06/25/13 12:56	06/26/13 16:26	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 2A-W-10-061913

Lab Sample ID: 580-39011-24

Date Collected: 06/19/13 12:26

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.18	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 16:46	1
Motor Oil (>C24-C36)	0.19	B Y	0.047	0.0093	mg/L		06/25/13 12:56	06/26/13 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	77		50 - 150				06/25/13 12:56	06/26/13 16:46	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: MW-4-061913

Lab Sample ID: 580-39011-25

Date Collected: 06/19/13 15:03

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.085	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 17:06	1
Motor Oil (>C24-C36)	0.11	B Y	0.047	0.0093	mg/L		06/25/13 12:56	06/26/13 17:06	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	92		50 - 150				06/25/13 12:56	06/26/13 17:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: MW-3-061913

Lab Sample ID: 580-39011-26

Date Collected: 06/19/13 16:10

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.056	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 17:25	1
Motor Oil (>C24-C36)	0.076	B Y	0.047	0.0093	mg/L		06/25/13 12:56	06/26/13 17:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				06/25/13 12:56	06/26/13 17:25	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 2A-W-100-061913

Lab Sample ID: 580-39011-27

Date Collected: 06/19/13 16:00

Matrix: Water

Date Received: 06/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.19	B Y	0.024	0.014	mg/L		06/25/13 12:56	06/26/13 17:45	1
Motor Oil (>C24-C36)	0.21	B Y	0.047	0.0093	mg/L		06/25/13 12:56	06/26/13 17:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				06/25/13 12:56	06/26/13 17:45	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-138415/1-A

Matrix: Water

Analysis Batch: 138611

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 138415

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.0161	J	0.025	0.015	mg/L		06/24/13 10:29	06/26/13 10:07	1
Motor Oil (>C24-C36)	0.0175	J	0.050	0.0098	mg/L		06/24/13 10:29	06/26/13 10:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150	06/24/13 10:29	06/26/13 10:07	1

Lab Sample ID: LCS 580-138415/2-A

Matrix: Water

Analysis Batch: 138611

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 138415

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.449		mg/L		90	70 - 140
Motor Oil (>C24-C36)	0.500	0.574		mg/L		115	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	93		50 - 150

Lab Sample ID: LCSD 580-138415/3-A

Matrix: Water

Analysis Batch: 138611

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 138415

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.476		mg/L		95	70 - 140	6	27
Motor Oil (>C24-C36)	0.500	0.607		mg/L		121	66 - 125	6	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	93		50 - 150

Lab Sample ID: MB 580-138547/1-A

Matrix: Water

Analysis Batch: 138607

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 138547

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.0172	J	0.025	0.015	mg/L		06/25/13 12:56	06/26/13 12:27	1
Motor Oil (>C24-C36)	0.0126	J	0.050	0.0098	mg/L		06/25/13 12:56	06/26/13 12:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150	06/25/13 12:56	06/26/13 12:27	1

Lab Sample ID: LCS 580-138547/2-A

Matrix: Water

Analysis Batch: 138607

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 138547

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.402		mg/L		80	70 - 140
Motor Oil (>C24-C36)	0.500	0.519		mg/L		104	66 - 125

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-138547/2-A

Matrix: Water

Analysis Batch: 138607

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 138547

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	77	LCS	50 - 150

Lab Sample ID: LCSD 580-138547/3-A

Matrix: Water

Analysis Batch: 138607

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 138547

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>Limit</i>
#2 Diesel (C10-C24)	0.500	0.371		mg/L		74	70 - 140	8	27
Motor Oil (>C24-C36)	0.500	0.499		mg/L		100	66 - 125	4	27

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	73	LCSD	50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 5-W-19-061813

Lab Sample ID: 580-39011-1

Date Collected: 06/18/13 08:55

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 12:13	EKK	TAL SEA

Client Sample ID: EW-2A-061813

Lab Sample ID: 580-39011-2

Date Collected: 06/18/13 09:15

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 12:31	EKK	TAL SEA

Client Sample ID: 5-W-18-061813

Lab Sample ID: 580-39011-3

Date Collected: 06/18/13 09:45

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 12:49	EKK	TAL SEA

Client Sample ID: GW-4-061813

Lab Sample ID: 580-39011-4

Date Collected: 06/18/13 10:15

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 13:43	EKK	TAL SEA

Client Sample ID: 5-W-16-061813

Lab Sample ID: 580-39011-5

Date Collected: 06/18/13 10:30

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 14:01	EKK	TAL SEA

Client Sample ID: 5-W-160-061813

Lab Sample ID: 580-39011-6

Date Collected: 06/18/13 10:30

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 14:18	EKK	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 5-W-17-061813

Lab Sample ID: 580-39011-7

Date Collected: 06/18/13 11:15

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 14:37	EKK	TAL SEA

Client Sample ID: 1C-W-1-061813

Lab Sample ID: 580-39011-8

Date Collected: 06/18/13 11:25

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 14:54	EKK	TAL SEA

Client Sample ID: 5-W-15-061813

Lab Sample ID: 580-39011-9

Date Collected: 06/18/13 12:00

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 15:12	EKK	TAL SEA

Client Sample ID: 1C-W-8-061813

Lab Sample ID: 580-39011-10

Date Collected: 06/18/13 12:13

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 18:05	EKK	TAL SEA

Client Sample ID: 2B-W-4-061813

Lab Sample ID: 580-39011-11

Date Collected: 06/18/13 13:40

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 15:30	EKK	TAL SEA

Client Sample ID: 1C-W-7-061813

Lab Sample ID: 580-39011-12

Date Collected: 06/18/13 13:59

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 15:48	EKK	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 5-W-14-061813

Lab Sample ID: 580-39011-13

Date Collected: 06/18/13 14:20

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 16:06	EKK	TAL SEA

Client Sample ID: 2A-W-42-061813

Lab Sample ID: 580-39011-14

Date Collected: 06/18/13 15:00

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 16:24	EKK	TAL SEA

Client Sample ID: EW-1-061813

Lab Sample ID: 580-39011-15

Date Collected: 06/18/13 15:00

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 17:18	EKK	TAL SEA
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138727	06/27/13 10:42	EKK	TAL SEA

Client Sample ID: GW-1-061813

Lab Sample ID: 580-39011-16

Date Collected: 06/18/13 15:45

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138611	06/26/13 17:36	EKK	TAL SEA
Total/NA	Prep	3510C			138415	06/24/13 10:29	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138727	06/27/13 11:00	EKK	TAL SEA

Client Sample ID: 1C-W-70-061813

Lab Sample ID: 580-39011-17

Date Collected: 06/18/13 16:00

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 13:47	EKK	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: GW-3-061813

Lab Sample ID: 580-39011-18

Date Collected: 06/18/13 16:07

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 14:07	EKK	TAL SEA

Client Sample ID: GW-2-061813

Lab Sample ID: 580-39011-19

Date Collected: 06/18/13 16:30

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 14:27	EKK	TAL SEA

Client Sample ID: 1B-W-23-061813

Lab Sample ID: 580-39011-20

Date Collected: 06/18/13 16:47

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 14:46	EKK	TAL SEA

Client Sample ID: 2A-W-41-061913

Lab Sample ID: 580-39011-21

Date Collected: 06/19/13 08:48

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 15:06	EKK	TAL SEA

Client Sample ID: 2A-W-40-061913

Lab Sample ID: 580-39011-22

Date Collected: 06/19/13 09:53

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 15:26	EKK	TAL SEA

Client Sample ID: 2A-W-9-061913

Lab Sample ID: 580-39011-23

Date Collected: 06/19/13 10:53

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 16:26	EKK	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Client Sample ID: 2A-W-10-061913

Lab Sample ID: 580-39011-24

Date Collected: 06/19/13 12:26

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 16:46	EKK	TAL SEA

Client Sample ID: MW-4-061913

Lab Sample ID: 580-39011-25

Date Collected: 06/19/13 15:03

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 17:06	EKK	TAL SEA

Client Sample ID: MW-3-061913

Lab Sample ID: 580-39011-26

Date Collected: 06/19/13 16:10

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 17:25	EKK	TAL SEA

Client Sample ID: 2A-W-100-061913

Lab Sample ID: 580-39011-27

Date Collected: 06/19/13 16:00

Matrix: Water

Date Received: 06/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			138547	06/25/13 12:56	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	138607	06/26/13 17:45	EKK	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14



Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-39011-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-39011-1	5-W-19-061813	Water	06/18/13 08:55	06/20/13 16:15
580-39011-2	EW-2A-061813	Water	06/18/13 09:15	06/20/13 16:15
580-39011-3	5-W-18-061813	Water	06/18/13 09:45	06/20/13 16:15
580-39011-4	GW-4-061813	Water	06/18/13 10:15	06/20/13 16:15
580-39011-5	5-W-16-061813	Water	06/18/13 10:30	06/20/13 16:15
580-39011-6	5-W-160-061813	Water	06/18/13 10:30	06/20/13 16:15
580-39011-7	5-W-17-061813	Water	06/18/13 11:15	06/20/13 16:15
580-39011-8	1C-W-1-061813	Water	06/18/13 11:25	06/20/13 16:15
580-39011-9	5-W-15-061813	Water	06/18/13 12:00	06/20/13 16:15
580-39011-10	1C-W-8-061813	Water	06/18/13 12:13	06/20/13 16:15
580-39011-11	2B-W-4-061813	Water	06/18/13 13:40	06/20/13 16:15
580-39011-12	1C-W-7-061813	Water	06/18/13 13:59	06/20/13 16:15
580-39011-13	5-W-14-061813	Water	06/18/13 14:20	06/20/13 16:15
580-39011-14	2A-W-42-061813	Water	06/18/13 15:00	06/20/13 16:15
580-39011-15	EW-1-061813	Water	06/18/13 15:00	06/20/13 16:15
580-39011-16	GW-1-061813	Water	06/18/13 15:45	06/20/13 16:15
580-39011-17	1C-W-70-061813	Water	06/18/13 16:00	06/20/13 16:15
580-39011-18	GW-3-061813	Water	06/18/13 16:07	06/20/13 16:15
580-39011-19	GW-2-061813	Water	06/18/13 16:30	06/20/13 16:15
580-39011-20	1B-W-23-061813	Water	06/18/13 16:47	06/20/13 16:15
580-39011-21	2A-W-41-061913	Water	06/19/13 08:48	06/20/13 16:15
580-39011-22	2A-W-40-061913	Water	06/19/13 09:53	06/20/13 16:15
580-39011-23	2A-W-9-061913	Water	06/19/13 10:53	06/20/13 16:15
580-39011-24	2A-W-10-061913	Water	06/19/13 12:26	06/20/13 16:15
580-39011-25	MW-4-061913	Water	06/19/13 15:03	06/20/13 16:15
580-39011-26	MW-3-061913	Water	06/19/13 16:10	06/20/13 16:15
580-39011-27	2A-W-100-061913	Water	06/19/13 16:00	06/20/13 16:15



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: WA

Project City: SKYKOMISH

Project State of Origin: WA

BNSF Work Order No.:

Company: FABULON CONSULTING

Address: 975 5TH AVE NW

City/State/Zip: ISSAQUAH, WA 98027

Phone: 425-295-0839

Fac: 425-295-0850

Project Number: 1083-043

Project Manager: TERRY DOERFLE

Tracking Number:

Shipment Method:

Shipment Information:

LAB WORK ORDER: 39011

LABORATORY INFORMATION

Laboratory:

Address:

City/State/Zip:

Phone:

Fac:

Project Manager:

Address:

City/State/Zip:

Phone:

Fac:

Project Number:

Project Manager:

Tracking Number:

Shipment Method:

Shipment Information:

LAB WORK ORDER: 39011

LABORATORY INFORMATION

Laboratory:

Address:

City/State/Zip:

Phone:

Fac:

Project Manager:

Address:

City/State/Zip:

Phone:

Fac:

Project Number:

Project Manager:

Tracking Number:

Shipment Method:

Shipment Information:

LAB WORK ORDER: 39011

LABORATORY INFORMATION

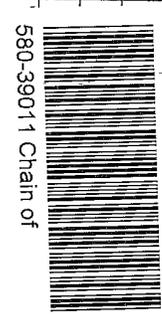
Laboratory:

Address:

City/State/Zip:

Phone:

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler						
1 S-W-19-061813	2	6/18/13	0855	AS	N	G	2	NWTPH-DX		1
2 EW-2A-061813			0915	DK						2
3 S-W-18-061813			0945	AS						3
4 CW-4-061813			1015	DK						4
5 S-W-10-061813			1030	AS						5
6 S-W-160-061813			1030	AS						6
7 S-W-17-061813			1115	AS						7
8 S-W-1-061813			1125	DK						8
9 S-W-15-061813			1200	AS						9
10 1C-W-8-061813			1213	DK						10
11 2B-W-4-061813			1340	AS						11
12 1C-W-7-061813			1359	DK						12
13 S-W-14-061813			1420	AS						13
14 2A-W-42-061813			1500	DK						14
15 EW-1-061813			1500	AS						15



Comments and Special Analytical Requirements:

Requested By: [Signature]

Date/Time: 6/19/13 2023

Requested By: [Signature]

Date/Time:

Requested By:

Date/Time:

Requested By:

Date/Time:

Requested By:

Date/Time:

Received by Laboratory:

Date/Time:

Received By:

Date/Time:

Received By:

Date/Time:

Received By:

Date/Time:

Received By:

Lab Custody Intact? Yes No

Custody Seal No. BNSF CCC No.

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)



BNSF RAILWAY

CHAIN OF CUSTODY

LABORATORY INFORMATION

Laboratory: **LAB WORK ORDER: 39011**

Address: **SHIPMENT INFORMATION**

City/State/Zip: **Tracking Number:**

Project State of Origin: **WA**

Project Cdr: **SKYKOMISH**

Project Number: **1083-043**

Project Manager: **JERRY POITTELE**

BNSF PROJECT INFORMATION

BNSF Project Number: **SKYKOMISH**

BNSF Work Order No.: **ISSAQUAH, WA 98027**

BNSF Project Name: **SKYKOMISH GROUNDWATER**

BNSF Contact: **BOUCE, SHERPARD**

Address: **975 5TH AVE NW**

City/State/Zip: **ISSAQUAH, WA 98027**

Phone: **425-295-0839**

Fax: **425-295-0850**

Project Manager: **JERRY POITTELE**

Project Number: **1083-043**

Project Manager: **JERRY POITTELE**

Phone: **425-295-0839**

Fax: **425-295-0850**

TURNAROUND TIME

1-day Rush

5- to 8-day Rush

2-day Rush

Standard 10-Day

3-day Rush

Other _____

DELIVERABLES

BNSF Standard (Level II)

Level III

Level IV

Other Deliverables?

EDD Req. Format?

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/ Grab)	Matrix	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler						
GW-1-061813	2	6/18/13	1545	AS	N	G	W			16
1C-W-70-061813			1600	DK						17
GW-3-061813			1607	DK						18
GW-2-061813			1630	AS						19
1B-W-23-061813		6/19/13	1647	DK						20
2A-W-41-061913			0848	DK						21
2A-W-40-061913			0953							22
2A-W-9-061913			1053							23
2A-W-10-061913			1224							24
2A-W-4-061913			1503							25
MW-3-061913			1610							26
MW-100-061913			1600							27

DISINQUISHED BY:

Disinquired By: **6/19/13 2023**

Date/Time: **6/19/13 2023**

Received By: **[Signature]**

Date/Time: **6/20/13 1140**

RECEIVED BY LABORATORY:

Date/Time: _____

Lab Remarks: _____

Lab Custody Intact? Yes No

Custody Seal No. _____

BNSF COC No. _____

Comments and Special Analytical Requirements: _____

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-39011-1

Login Number: 39011

List Source: TestAmerica Seattle

List Number: 1

Creator: Balles, Racheal M

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-39582-1

Client Project/Site: BNSF Skykomish Ground Water
Revision: 1

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele



Authorized for release by:
8/9/2013 2:58:14 PM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

LINKS

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results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39582-1

Job ID: 580-39582-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 8/1/2013 9:50 AM. The temperature of the cooler at receipt was 8.5° C.

Except:

The following samples were received at the laboratory outside the required temperature criteria: 8.5°C All containers were received on top of the ice. 1C-W-3-073113 (580-39582-4), 1C-W-70-073113 (580-39582-3), 1C-W-7-073113 (580-39582-2), 1C-W-8-073113 (580-39582-1).

GC Semi VOA

Method(s) NWTPH-Dx: In analytical batch 141562, the method blank for preparation batch 141529 contained #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39582-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39582-1

Client Sample ID: 1C-W-8-073113

Lab Sample ID: 580-39582-1

Date Collected: 07/31/13 12:19

Matrix: Water

Date Received: 08/01/13 09:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.046	J B	0.12	0.014	mg/L		08/02/13 11:02	08/02/13 18:23	1
Motor Oil (>C24-C36)	0.044	J B	0.24	0.0093	mg/L		08/02/13 11:02	08/02/13 18:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	70		50 - 150				08/02/13 11:02	08/02/13 18:23	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39582-1

Client Sample ID: 1C-W-7-073113

Lab Sample ID: 580-39582-2

Date Collected: 07/31/13 13:06

Matrix: Water

Date Received: 08/01/13 09:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.081	J B	0.12	0.014	mg/L		08/02/13 11:02	08/02/13 18:41	1
Motor Oil (>C24-C36)	0.089	J B	0.24	0.0093	mg/L		08/02/13 11:02	08/02/13 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				08/02/13 11:02	08/02/13 18:41	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39582-1

Client Sample ID: 1C-W-70-073113

Lab Sample ID: 580-39582-3

Date Collected: 07/31/13 16:00

Matrix: Water

Date Received: 08/01/13 09:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.094	J B	0.12	0.014	mg/L		08/02/13 11:02	08/02/13 18:59	1
Motor Oil (>C24-C36)	0.11	J B	0.24	0.0093	mg/L		08/02/13 11:02	08/02/13 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				08/02/13 11:02	08/02/13 18:59	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39582-1

Client Sample ID: 1B-W-3-073113

Lab Sample ID: 580-39582-4

Date Collected: 07/31/13 14:32

Matrix: Water

Date Received: 08/01/13 09:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.042	J B	0.12	0.014	mg/L		08/02/13 11:02	08/02/13 19:17	1
Motor Oil (>C24-C36)	0.060	J B	0.24	0.0093	mg/L		08/02/13 11:02	08/02/13 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				08/02/13 11:02	08/02/13 19:17	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39582-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-141529/1-A

Matrix: Water

Analysis Batch: 141562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 141529

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.0227	J	0.13	0.015	mg/L		08/02/13 11:02	08/02/13 17:30	1
Motor Oil (>C24-C36)	0.0336	J	0.25	0.0098	mg/L		08/02/13 11:02	08/02/13 17:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150	08/02/13 11:02	08/02/13 17:30	1

Lab Sample ID: LCS 580-141529/2-A

Matrix: Water

Analysis Batch: 141562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 141529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.409		mg/L		82	70 - 140
Motor Oil (>C24-C36)	0.500	0.516		mg/L		103	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	84		50 - 150

Lab Sample ID: LCSD 580-141529/3-A

Matrix: Water

Analysis Batch: 141562

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 141529

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.413		mg/L		83	70 - 140	1	27
Motor Oil (>C24-C36)	0.500	0.503		mg/L		101	66 - 125	3	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	83		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39582-1

Client Sample ID: 1C-W-8-073113

Lab Sample ID: 580-39582-1

Date Collected: 07/31/13 12:19

Matrix: Water

Date Received: 08/01/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			141529	08/02/13 11:02	AJHW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	141562	08/02/13 18:23	JL1	TAL SEA

Client Sample ID: 1C-W-7-073113

Lab Sample ID: 580-39582-2

Date Collected: 07/31/13 13:06

Matrix: Water

Date Received: 08/01/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			141529	08/02/13 11:02	AJHW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	141562	08/02/13 18:41	JL1	TAL SEA

Client Sample ID: 1C-W-70-073113

Lab Sample ID: 580-39582-3

Date Collected: 07/31/13 16:00

Matrix: Water

Date Received: 08/01/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			141529	08/02/13 11:02	AJHW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	141562	08/02/13 18:59	JL1	TAL SEA

Client Sample ID: 1B-W-3-073113

Lab Sample ID: 580-39582-4

Date Collected: 07/31/13 14:32

Matrix: Water

Date Received: 08/01/13 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			141529	08/02/13 11:02	AJHW	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	141562	08/02/13 19:17	JL1	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39582-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39582-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-39582-1	1C-W-8-073113	Water	07/31/13 12:19	08/01/13 09:50
580-39582-2	1C-W-7-073113	Water	07/31/13 13:06	08/01/13 09:50
580-39582-3	1C-W-70-073113	Water	07/31/13 16:00	08/01/13 09:50
580-39582-4	1B-W-3-073113	Water	07/31/13 14:32	08/01/13 09:50

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-39582-1

Login Number: 39582

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-39977-1

Client Project/Site: BNSF Skykomish Ground Water

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele

Kristine D. Allen

Authorized for release by:
8/30/2013 6:30:57 PM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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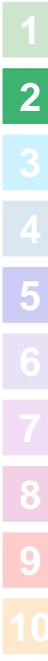


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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39977-1

Job ID: 580-39977-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 8/27/2013 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8° C.

Except:

The sample containers are not from Test America. There is a lot number on the containers and has been recorded in the log-in.

GC Semi VOA

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39977-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39977-1

Client Sample ID: 1C-W-8-082613

Lab Sample ID: 580-39977-1

Date Collected: 08/26/13 14:10

Matrix: Water

Date Received: 08/27/13 08:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.063	J	0.13	0.015	mg/L		08/28/13 11:18	08/29/13 13:23	1
Motor Oil (>C24-C36)	0.065	J	0.25	0.010	mg/L		08/28/13 11:18	08/29/13 13:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		50 - 150				08/28/13 11:18	08/29/13 13:23	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39977-1

Client Sample ID: 1C-W-7-082613

Lab Sample ID: 580-39977-2

Date Collected: 08/26/13 14:50

Matrix: Water

Date Received: 08/27/13 08:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.083	J	0.13	0.015	mg/L		08/28/13 11:18	08/29/13 13:40	1
Motor Oil (>C24-C36)	0.064	J	0.25	0.010	mg/L		08/28/13 11:18	08/29/13 13:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		50 - 150				08/28/13 11:18	08/29/13 13:40	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39977-1

Client Sample ID: 1C-W-70-082613

Lab Sample ID: 580-39977-3

Date Collected: 08/26/13 16:00

Matrix: Water

Date Received: 08/27/13 08:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.085	J	0.13	0.015	mg/L		08/28/13 11:18	08/29/13 13:58	1
Motor Oil (>C24-C36)	0.057	J	0.25	0.0099	mg/L		08/28/13 11:18	08/29/13 13:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				08/28/13 11:18	08/29/13 13:58	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39977-1

Client Sample ID: 1B-W-3-082613

Lab Sample ID: 580-39977-4

Date Collected: 08/26/13 16:15

Matrix: Water

Date Received: 08/27/13 08:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.030	J	0.13	0.015	mg/L		08/28/13 11:18	08/29/13 14:16	1
Motor Oil (>C24-C36)	0.033	J	0.25	0.0098	mg/L		08/28/13 11:18	08/29/13 14:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				08/28/13 11:18	08/29/13 14:16	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39977-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-143624/1-A

Matrix: Water

Analysis Batch: 143720

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 143624

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13	0.015	mg/L		08/28/13 11:18	08/29/13 10:24	1
Motor Oil (>C24-C36)	ND		0.25	0.0098	mg/L		08/28/13 11:18	08/29/13 10:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150	08/28/13 11:18	08/29/13 10:24	1

Lab Sample ID: LCS 580-143624/2-A

Matrix: Water

Analysis Batch: 143720

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 143624

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.373		mg/L		75	70 - 140
Motor Oil (>C24-C36)	0.500	0.422		mg/L		84	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	80		50 - 150

Lab Sample ID: LCSD 580-143624/3-A

Matrix: Water

Analysis Batch: 143720

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 143624

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.441		mg/L		88	70 - 140	17	27
Motor Oil (>C24-C36)	0.500	0.496		mg/L		99	66 - 125	16	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	94		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39977-1

Client Sample ID: 1C-W-8-082613

Date Collected: 08/26/13 14:10

Date Received: 08/27/13 08:30

Lab Sample ID: 580-39977-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			143624	08/28/13 11:18	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	143720	08/29/13 13:23	JL1	TAL SEA

Client Sample ID: 1C-W-7-082613

Date Collected: 08/26/13 14:50

Date Received: 08/27/13 08:30

Lab Sample ID: 580-39977-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			143624	08/28/13 11:18	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	143720	08/29/13 13:40	JL1	TAL SEA

Client Sample ID: 1C-W-70-082613

Date Collected: 08/26/13 16:00

Date Received: 08/27/13 08:30

Lab Sample ID: 580-39977-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			143624	08/28/13 11:18	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	143720	08/29/13 13:58	JL1	TAL SEA

Client Sample ID: 1B-W-3-082613

Date Collected: 08/26/13 16:15

Date Received: 08/27/13 08:30

Lab Sample ID: 580-39977-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			143624	08/28/13 11:18	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	143720	08/29/13 14:16	JL1	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39977-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-39977-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-39977-1	1C-W-8-082613	Water	08/26/13 14:10	08/27/13 08:30
580-39977-2	1C-W-7-082613	Water	08/26/13 14:50	08/27/13 08:30
580-39977-3	1C-W-70-082613	Water	08/26/13 16:00	08/27/13 08:30
580-39977-4	1B-W-3-082613	Water	08/26/13 16:15	08/27/13 08:30

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-39977-1

Login Number: 39977

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-40429-1

Client Project/Site: Skykomish Ground Water
Revision: 1

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele



Authorized for release by:
11/5/2013 4:17:04 PM

Kristine Allen, Project Manager I
(253)922-2310

kristine.allen@testamericainc.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Job ID: 580-40429-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 9/19/2013 4:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 5.4° C and 10.7° C.

Except:

The following samples were received at the laboratory outside the required temperature criteria: 1B-W-23-091813 (580-40429-39), 1B-W-3-091813 (580-40429-44), 1C-W-1-091813 (580-40429-13), 1C-W-4-091813 (580-40429-33), 1C-W-8-091813 (580-40429-42), 2A-W-41-091713 (580-40429-3), 2A-W-420-091713 (580-40429-11), 2A-W-8-091813 (580-40429-15), 5-W-15-091713 (580-40429-18), 5-W-16-091613 (580-40429-47), 5-W-170-091713 (580-40429-16), 5-W18-091713 (580-40429-56), 5-W-56-091613 (580-40429-48), GW-1-091813 (580-40429-32), GW-3-091713 (580-40429-27), GW-4-091713 (580-40429-54), S1-AD-091713 (580-40429-9), S1-BU-091713 (580-40429-2), S2-AD-091713 (580-40429-6), S2-BU-091713 (580-40429-4), S3-AD-091713 (580-40429-28), S4-AD-091713 (580-40429-58), S4-BD-091713 (580-40429-55), S4-BU-091713 (580-40429-57), S4-CD-091713 (580-40429-52), S4-CU-091713 (580-40429-53).

Samples received at 10.7°C.

Client submitted 60 samples and did not indicate MS/MSD for any sample on the CoC, nor was extra volume provided for MS/MSD.

All samples logged in for Dx, several samples were not checked for analysis on the CoC. Per PM, all samples assigned Dx.

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): EW-2A-091813 (580-40429-35), S2-BD-091713 (580-40429-1). The container labels list time of 1447 for sample 1 and time of 1013 for sample 35. The COC lists time of 1441 for sample 1 and 1113 for sample 35. Logged in per COC.

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC): 5-W-56-091613 (580-40429-48), S4-BU-091713 (580-40429-57).

The container labels list a time of 1620. The COC lists a time of 1602.

The container labels list a date of 9/13. The COC lists a date of 9/17.

Logged in according to the COC.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 146331, the method blank for preparation batch 145910 contained #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 146331, the laboratory control sample (LCS) and laboratory control sample duplicated (LCSD) for preparation batch 145910 recovered below the lower control limits for the following analytes: #2 Diesel Fuel (C10-C24). The associated sample(s) were re-extracted outside holding time. Both sets of data have been reported.

There was a discrepancy between the original and re-extracted data for the following samples: 2A-W-41-091713 (580-40429-3), S2-BU-091713 (580-40429-4) and S1-BD-091713 (580-40429-5). To confirm this discrepancy, the original extracts were re-injected. The re-injected results were not comparable to the results from the first injection suggesting a sample labeling error. The original extracts from all of the samples from the job also re-injected. The results from the second injection of all of the others samples compared to the results for the first injections. The results from the re-injected extracts for samples 2A-W-41-091713 (580-40429-3), S2-BU-091713 (580-40429-4) and S1-BD-091713 (580-40429-5) are comparable to the re-extracted results for these samples and have been reported.

In analytical batch 146227, from preparation batch 146158 the method blank contained #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 146227, from preparation batch 146158 the laboratory control sample and laboratory control sample duplicate (LCS/LCSD) recovered below the lower control limits for the following analytes: #2 Diesel Fuel (C10-C24). The associated sample(s) was re-prepared and re-analyzed outside holding time. Both sets of data have been reported.

Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Job ID: 580-40429-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

In analytical batch 146544, the method blank for preparation batch 146257 contained #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction of samples was not performed.

In analytical batch 146331, #2 Diesel Fuel (C10-C24) was detected above the reporting limit (RL) in the method blank associated with preparation batch 146334 as well as in the following sample(s): (MB 580-146344/1-A), 1B-W-2-091813 (580-40429-43), 1B-W-23-091813 (580-40429-39), 1C-W-4-091813 (580-40429-33), 2A-W-10-091813 (580-40429-38), GW-1-091813 (580-40429-32), MW-4-091813 (580-40429-34). All affected samples were re-extracted outside of holding time. Both sets of data have been reported. Sample which did not have detections above the reporting limit for #2 Diesel Fuel (C10-C24) were not re-extracted.

In analytical batch 146589, the method blank for preparation batch 146444 contained #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) above the reporting limit (RL). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

In analytical batch 146682, from preparation batch 146594 the method blank contained #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

In analytical batch 16227 the following sample(s) from preparation batch 146158: 5-W-15-091713 (580-40429-18), S4-BU-091713 (580-40429-57), S4-CD-091713 (580-40429-52), S4-CU-091713 (580-40429-53), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of weathered/degraded diesel fuel and motor oil. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146227, for the following sample(s) from preparation batch 146158: 1C-W-7-091713 (580-40429-59), 5-W-18-091713 (580-40429-56), S4-BD-091713 (580-40429-55), the results in the #2 Diesel Fuel (C10-C24) range is due to what most closely resembles a complex mixture of weathered/degraded diesel fuel. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146331, for the following sample(s) from preparation batch 145910: 2A-W-41-091713 (580-40429-3), 5-W-50-091613 (580-40429-50), 5-W-55-091613 (580-40429-49), 5-W-56-091613 (580-40429-48), S1-BD-091713 (580-40429-5), S1-BU-091713 (580-40429-2), S2-BD-091713 (580-40429-1), S2-BU-091713 (580-40429-4), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146331, for the following sample(s) from preparation batch 146344: 1B-W-2-091813 (580-40429-43), 1C-W-4-091813 (580-40429-33), GW-1-091813 (580-40429-32), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146331, for the following sample(s) from preparation batch 146344: 1B-W-23-091813 (580-40429-39), 2A-W-10-091813 (580-40429-38), MW-4-091813 (580-40429-34), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146544, for the following sample(s) from preparation batch 146257: S1-AU-091713 (580-40429-8), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a grouping of individual peak(s) that may be due to 8270/PAH analytes; analysis by 8270 GC/MS is recommended for peak identification. The affected analyte range(s) have been Z qualified and reported.

In analytical batch 146544, for the following sample(s) from preparation batch 146257: 1C-W-70-091713 (580-40429-10), 2A-W-420-091713 (580-40429-11), 2A-W-42-091713 (580-40429-21), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been

Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

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Laboratory: TestAmerica Seattle (Continued)

Y qualified and reported.

In analytical batch 146544, for the following sample(s) from preparation batch 146257: S4-AU-091713 (580-40429-17), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a grouping of individual peak(s) that may be due to 8270/PAH analytes; analysis by 8270 GC/MS is recommended for peak identification. The affected analyte range(s) have been Z qualified and reported.

In analytical batch 146589, for the following sample(s) from preparation batch 146444: 1C-W-7-091713 (580-40429-59), 5-W-15-091713 (580-40429-18), 5-W-17-091713 (580-40429-60), 5-W18-091713 (580-40429-56), S4-AD-091713 (580-40429-58), S4-BU-091713 (580-40429-57), S4-CD-091713 (580-40429-52), S4-CU-091713 (580-40429-53), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, motor oil, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146589, for the following sample(s) from preparation batch 146444: GW-4-091713 (580-40429-54), the results in the #2 Diesel Fuel (C10-C24) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146682, for the following sample(s) from preparation batch 146594: 5-W-50-091613 (580-40429-50), 5-W-56-091613 (580-40429-48), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture weathered/degraded diesel fuel, motor oil, and a mineral/transformer oil range product. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146682, for the following sample(s) from preparation batch 146594: 2A-W-10-091813 (580-40429-38), 2A-W-41-091713 (580-40429-3), MW-4-091813 (580-40429-34), S1-BD-091713 (580-40429-5), the result in the #2 Diesel Fuel (C10-C24) range is due to what most closely resembles a complex mixture of weathered/degraded diesel. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 146682, for the following sample(s) from preparation batch 146594: 5-W-55-091613 (580-40429-49), S2-BD-091713 (580-40429-1), S2-BU-091713 (580-40429-4), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of weathered/degraded diesel and motor oil. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Organic Prep

Method(s) 3510C: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows:

A duplicate or MS/MSD sample was not included in batch because there was no extra sample provided for duplicate. An LCSD was prepared.

Method(s) 3510C: The following sample(s) was prepared outside of preparation holding time due to failing LCS/LCSD recoveries in original batch: 1C-W-7-091713 (580-40429-59), 5-W-15-091713 (580-40429-18), 5-W-17-091713 (580-40429-60), 5-W18-091713 (580-40429-56), GW-4-091713 (580-40429-54), S3-CD-091713 (580-40429-19), S4-AD-091713 (580-40429-58), S4-BD-091713 (580-40429-55), S4-BU-091713 (580-40429-57), S4-CD-091713 (580-40429-52), S4-CU-091713 (580-40429-53), 1B-W-2-091813 (580-40429-43), 1B-W-23-091813 (580-40429-39), 1C-W-4-091813 (580-40429-33), 2A-W-10-091813 (580-40429-38), 2A-W-41-091713 (580-40429-3), 5-W-16-091613 (580-40429-47), 5-W-19-091613 (580-40429-46), 5-W-50-091613 (580-40429-50), 5-W-55-091613 (580-40429-49), 5-W-56-091613 (580-40429-48), GW-1-091813 (580-40429-32), MW-3-091813 (580-40429-45), MW-4-091813 (580-40429-34), S1-BD-091713 (580-40429-5), S1-BU-091713 (580-40429-2), S2-BD-091713 (580-40429-1), S2-BU-091713 (580-40429-4).

No other analytical or quality issues were noted.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	Sample was prepped or analyzed beyond the specified holding time
Y	The chromatographic response resembles a typical fuel pattern.
Z	The chromatographic response does not resemble a typical fuel pattern.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S2-BD-091713

Lab Sample ID: 580-40429-1

Date Collected: 09/17/13 14:41

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.095	J B *	0.12	0.018	mg/L		09/26/13 13:15	10/02/13 14:53	1
Motor Oil (>C24-C36)	0.22	J B	0.24	0.028	mg/L		09/26/13 13:15	10/02/13 14:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				09/26/13 13:15	10/02/13 14:53	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16	H B Y	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 12:43	1
Motor Oil (>C24-C36)	0.34	H B Y	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 12:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				10/04/13 12:34	10/07/13 12:43	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S1-BU-091713

Lab Sample ID: 580-40429-2

Date Collected: 09/17/13 14:45

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.061	J B *	0.12	0.019	mg/L		09/26/13 13:15	10/02/13 15:11	1
Motor Oil (>C24-C36)	0.099	J B	0.24	0.028	mg/L		09/26/13 13:15	10/02/13 15:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	81		50 - 150				09/26/13 13:15	10/02/13 15:11	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.075	J H B	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 13:01	1
Motor Oil (>C24-C36)	0.095	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 13:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	69		50 - 150				10/04/13 12:34	10/07/13 13:01	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 2A-W-41-091713

Lab Sample ID: 580-40429-3

Date Collected: 09/17/13 14:47

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	1.2	* B Y	0.12	0.018	mg/L		09/26/13 13:15	10/02/13 16:05	1
Motor Oil (>C24-C36)	0.24	B Y	0.24	0.028	mg/L		09/26/13 13:15	10/02/13 16:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				09/26/13 13:15	10/02/13 16:05	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11	J B	0.12	0.018	mg/L		09/26/13 13:15	11/01/13 10:45	1
Motor Oil (>C24-C36)	ND		0.24	0.028	mg/L		09/26/13 13:15	11/01/13 10:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	63		50 - 150				09/26/13 13:15	11/01/13 10:45	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.15	H B Y	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 13:19	1
Motor Oil (>C24-C36)	0.13	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 13:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	62		50 - 150				10/04/13 12:34	10/07/13 13:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S2-BU-091713

Lab Sample ID: 580-40429-4

Date Collected: 09/17/13 14:57

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	3.0	* B Y	0.12	0.018	mg/L		09/26/13 13:15	10/02/13 16:22	1
Motor Oil (>C24-C36)	0.64	B Y	0.24	0.028	mg/L		09/26/13 13:15	10/02/13 16:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				09/26/13 13:15	10/02/13 16:22	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.35	B	0.12	0.018	mg/L		09/26/13 13:15	11/01/13 13:25	1
Motor Oil (>C24-C36)	0.31	B	0.24	0.028	mg/L		09/26/13 13:15	11/01/13 13:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	45	X	50 - 150				09/26/13 13:15	11/01/13 13:25	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.30	H B Y	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 13:36	1
Motor Oil (>C24-C36)	0.42	H B Y	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 13:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				10/04/13 12:34	10/07/13 13:36	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S1-BD-091713

Lab Sample ID: 580-40429-5

Date Collected: 09/17/13 15:00

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.96	* B Y	0.12	0.019	mg/L		09/26/13 13:15	10/02/13 16:40	1
Motor Oil (>C24-C36)	0.71	B Y	0.24	0.028	mg/L		09/26/13 13:15	10/02/13 16:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				09/26/13 13:15	10/02/13 16:40	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.062	J B	0.12	0.019	mg/L		09/26/13 13:15	11/01/13 13:43	1
Motor Oil (>C24-C36)	0.031	J B	0.24	0.028	mg/L		09/26/13 13:15	11/01/13 13:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	57		50 - 150				09/26/13 13:15	11/01/13 13:43	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11	J H B	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 13:54	1
Motor Oil (>C24-C36)	0.12	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 13:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				10/04/13 12:34	10/07/13 13:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S2-AD-091713

Lab Sample ID: 580-40429-6

Date Collected: 09/17/13 15:10

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.075	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 11:17	1
Motor Oil (>C24-C36)	0.14	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 11:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				10/01/13 12:49	10/04/13 11:17	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S2-AU-091713

Lab Sample ID: 580-40429-7

Date Collected: 09/17/13 15:10

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.062	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 11:35	1
Motor Oil (>C24-C36)	0.10	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 11:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				10/01/13 12:49	10/04/13 11:35	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S1-AU-091713

Lab Sample ID: 580-40429-8

Date Collected: 09/17/13 15:15

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.17	B Z	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 11:53	1
Motor Oil (>C24-C36)	0.26	B Z	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 11:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				10/01/13 12:49	10/04/13 11:53	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S1-AD-091713

Lab Sample ID: 580-40429-9

Date Collected: 09/17/13 15:28

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 12:11	1
Motor Oil (>C24-C36)	0.17	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 12:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	88		50 - 150				10/01/13 12:49	10/04/13 12:11	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1C-W-70-091713

Lab Sample ID: 580-40429-10

Date Collected: 09/17/13 17:00

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	B Y	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 12:28	1
Motor Oil (>C24-C36)	0.12	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 12:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				10/01/13 12:49	10/04/13 12:28	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 2A-W-420-091713

Lab Sample ID: 580-40429-11

Date Collected: 09/17/13 17:01

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.19	B Y	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 12:46	1
Motor Oil (>C24-C36)	0.15	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 12:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				10/01/13 12:49	10/04/13 12:46	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: MW-16-091813

Lab Sample ID: 580-40429-12

Date Collected: 09/18/13 09:43

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.089	J B	0.12	0.019	mg/L		10/02/13 09:10	10/02/13 19:03	1
Motor Oil (>C24-C36)	0.14	J B	0.25	0.029	mg/L		10/02/13 09:10	10/02/13 19:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				10/02/13 09:10	10/02/13 19:03	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1C-W-1-091813

Lab Sample ID: 580-40429-13

Date Collected: 09/18/13 09:47

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.076	J B	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 19:20	1
Motor Oil (>C24-C36)	0.12	J B	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 19:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				10/02/13 09:10	10/02/13 19:20	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: EW-1-091813

Lab Sample ID: 580-40429-14

Date Collected: 09/18/13 09:50

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.094	J B	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 19:38	1
Motor Oil (>C24-C36)	0.14	J B	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 19:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				10/02/13 09:10	10/02/13 19:38	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 2A-W-8-091813

Lab Sample ID: 580-40429-15

Date Collected: 09/18/13 09:59

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.067	J B	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 19:56	1
Motor Oil (>C24-C36)	0.12	J B	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 19:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	87		50 - 150				10/02/13 09:10	10/02/13 19:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-170-091713

Lab Sample ID: 580-40429-16

Date Collected: 09/17/13 10:18

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.063	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 13:04	1
Motor Oil (>C24-C36)	0.10	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 13:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				10/01/13 12:49	10/04/13 13:04	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S4-AU-091713

Lab Sample ID: 580-40429-17

Date Collected: 09/17/13 10:17

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.17	B Z	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 13:57	1
Motor Oil (>C24-C36)	0.20	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 13:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		50 - 150				10/01/13 12:49	10/04/13 13:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-15-091713

Lab Sample ID: 580-40429-18

Date Collected: 09/17/13 11:11

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.33	* B Y	0.12	0.019	mg/L		09/30/13 13:47	10/01/13 21:48	1
Motor Oil (>C24-C36)	0.34	B Y	0.24	0.028	mg/L		09/30/13 13:47	10/01/13 21:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	62		50 - 150				09/30/13 13:47	10/01/13 21:48	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.39	H Y B	0.12	0.019	mg/L		10/03/13 09:27	10/04/13 16:19	1
Motor Oil (>C24-C36)	0.31	H Y B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 16:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	72		50 - 150				10/03/13 09:27	10/04/13 16:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S3-CD-091713

Lab Sample ID: 580-40429-19

Date Collected: 09/17/13 11:17

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11	J B *	0.12	0.018	mg/L		09/30/13 13:47	10/01/13 22:04	1
Motor Oil (>C24-C36)	0.20	J B	0.24	0.028	mg/L		09/30/13 13:47	10/01/13 22:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	72		50 - 150				09/30/13 13:47	10/01/13 22:04	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.079	J H B	0.12	0.018	mg/L		10/03/13 09:27	10/04/13 16:37	1
Motor Oil (>C24-C36)	0.095	J H B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 16:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	66		50 - 150				10/03/13 09:27	10/04/13 16:37	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S3-CU-091713

Lab Sample ID: 580-40429-20

Date Collected: 09/17/13 11:30

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.055	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 14:15	1
Motor Oil (>C24-C36)	0.12	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 14:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				10/01/13 12:49	10/04/13 14:15	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 2A-W-42-091713

Lab Sample ID: 580-40429-21

Date Collected: 09/17/13 11:34

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.20	B Y	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 14:33	1
Motor Oil (>C24-C36)	0.17	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 14:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				10/01/13 12:49	10/04/13 14:33	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-14-091713

Lab Sample ID: 580-40429-22

Date Collected: 09/17/13 11:54

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.085	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 14:51	1
Motor Oil (>C24-C36)	0.15	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 14:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				10/01/13 12:49	10/04/13 14:51	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S3-BD-091713

Lab Sample ID: 580-40429-23

Date Collected: 09/17/13 12:50

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12	0.018	mg/L		10/01/13 12:49	10/04/13 15:09	1
Motor Oil (>C24-C36)	0.064	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 15:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	96		50 - 150				10/01/13 12:49	10/04/13 15:09	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S40-AD-091713

Lab Sample ID: 580-40429-24

Date Collected: 09/17/13 12:34

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.072	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 15:27	1
Motor Oil (>C24-C36)	0.13	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 15:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				10/01/13 12:49	10/04/13 15:27	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S3-BU-091713

Lab Sample ID: 580-40429-25

Date Collected: 09/17/13 13:00

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.044	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 15:44	1
Motor Oil (>C24-C36)	0.10	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 15:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		50 - 150				10/01/13 12:49	10/04/13 15:44	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: MW-38R-091713

Lab Sample ID: 580-40429-26

Date Collected: 09/17/13 13:24

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.082	J B	0.12	0.019	mg/L		10/01/13 12:49	10/04/13 16:02	1
Motor Oil (>C24-C36)	0.14	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 16:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	104		50 - 150				10/01/13 12:49	10/04/13 16:02	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: GW-3-091713

Lab Sample ID: 580-40429-27

Date Collected: 09/17/13 13:29

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.024	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 16:20	1
Motor Oil (>C24-C36)	0.076	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 16:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	90		50 - 150				10/01/13 12:49	10/04/13 16:20	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S3-AD-091713

Lab Sample ID: 580-40429-28

Date Collected: 09/17/13 13:50

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.051	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 16:38	1
Motor Oil (>C24-C36)	0.11	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 16:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		50 - 150				10/01/13 12:49	10/04/13 16:38	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S3-AU-091713

Lab Sample ID: 580-40429-29

Date Collected: 09/17/13 13:57

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.060	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 17:31	1
Motor Oil (>C24-C36)	0.10	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				10/01/13 12:49	10/04/13 17:31	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 2A-W-40-091713

Lab Sample ID: 580-40429-30

Date Collected: 09/17/13 14:27

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.060	J B	0.12	0.018	mg/L		10/01/13 12:49	10/04/13 17:49	1
Motor Oil (>C24-C36)	0.11	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 17:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				10/01/13 12:49	10/04/13 17:49	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 2B-W-4-091813

Lab Sample ID: 580-40429-31

Date Collected: 09/18/13 10:23

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.060	J B	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 20:14	1
Motor Oil (>C24-C36)	0.12	J B	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 20:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	60		50 - 150				10/02/13 09:10	10/02/13 20:14	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: GW-1-091813

Lab Sample ID: 580-40429-32

Date Collected: 09/18/13 10:35

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	B Y	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 20:32	1
Motor Oil (>C24-C36)	0.15	J B	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 20:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				10/02/13 09:10	10/02/13 20:32	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.094	J H B	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 14:12	1
Motor Oil (>C24-C36)	0.11	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 14:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	58		50 - 150				10/04/13 12:34	10/07/13 14:12	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1C-W-4-091813

Lab Sample ID: 580-40429-33

Date Collected: 09/18/13 10:37

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	B Y	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 21:25	1
Motor Oil (>C24-C36)	0.15	J B	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 21:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				10/02/13 09:10	10/02/13 21:25	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.069	J H B	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 14:30	1
Motor Oil (>C24-C36)	0.077	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	55		50 - 150				10/04/13 12:34	10/07/13 14:30	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: MW-4-091813

Lab Sample ID: 580-40429-34

Date Collected: 09/18/13 10:57

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.24	B Y	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 21:43	1
Motor Oil (>C24-C36)	0.31	B Y	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 21:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	94		50 - 150				10/02/13 09:10	10/02/13 21:43	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.19	H B Y	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 15:24	1
Motor Oil (>C24-C36)	0.15	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 15:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	66		50 - 150				10/04/13 12:34	10/07/13 15:24	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: EW-2A-091813

Lab Sample ID: 580-40429-35

Date Collected: 09/18/13 11:13

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.079	J B	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 22:01	1
Motor Oil (>C24-C36)	0.15	J B	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 22:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	89		50 - 150				10/02/13 09:10	10/02/13 22:01	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: GW-2-091813

Lab Sample ID: 580-40429-36

Date Collected: 09/18/13 11:22

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.067	J B	0.12	0.019	mg/L		10/02/13 09:10	10/02/13 22:19	1
Motor Oil (>C24-C36)	0.16	J B	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 22:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	91		50 - 150				10/02/13 09:10	10/02/13 22:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1C-W-3-091813

Lab Sample ID: 580-40429-37

Date Collected: 09/18/13 11:30

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.059	J B	0.12	0.019	mg/L		10/02/13 09:10	10/02/13 22:36	1
Motor Oil (>C24-C36)	0.15	J B	0.25	0.029	mg/L		10/02/13 09:10	10/02/13 22:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				10/02/13 09:10	10/02/13 22:36	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 2A-W-10-091813

Lab Sample ID: 580-40429-38

Date Collected: 09/18/13 11:40

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.22	B Y	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 22:54	1
Motor Oil (>C24-C36)	0.43	B Y	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 22:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				10/02/13 09:10	10/02/13 22:54	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.14	H B Y	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 15:42	1
Motor Oil (>C24-C36)	0.20	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 15:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	66		50 - 150				10/04/13 12:34	10/07/13 15:42	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1B-W-23-091813

Lab Sample ID: 580-40429-39

Date Collected: 09/18/13 11:48

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	B Y	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 23:12	1
Motor Oil (>C24-C36)	0.24	B Y	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 23:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				10/02/13 09:10	10/02/13 23:12	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.065	J H B	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 15:59	1
Motor Oil (>C24-C36)	0.095	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 15:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	58		50 - 150				10/04/13 12:34	10/07/13 15:59	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1B-W-230-091813

Lab Sample ID: 580-40429-40

Date Collected: 09/18/13 11:50

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.094	J B	0.12	0.018	mg/L		10/02/13 09:10	10/02/13 23:30	1
Motor Oil (>C24-C36)	0.20	J B	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 23:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				10/02/13 09:10	10/02/13 23:30	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1A-W-4-091813

Lab Sample ID: 580-40429-41

Date Collected: 09/18/13 12:15

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.046	J B	0.12	0.019	mg/L		10/02/13 09:10	10/02/13 23:48	1
Motor Oil (>C24-C36)	0.13	J B	0.24	0.028	mg/L		10/02/13 09:10	10/02/13 23:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	80		50 - 150				10/02/13 09:10	10/02/13 23:48	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1C-W-8-091813

Lab Sample ID: 580-40429-42

Date Collected: 09/18/13 13:04

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11	J B	0.12	0.018	mg/L		10/02/13 09:10	10/03/13 00:05	1
Motor Oil (>C24-C36)	0.21	J B	0.24	0.028	mg/L		10/02/13 09:10	10/03/13 00:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				10/02/13 09:10	10/03/13 00:05	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1B-W-2-091813

Lab Sample ID: 580-40429-43

Date Collected: 09/18/13 13:43

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16	B Y	0.12	0.019	mg/L		10/02/13 09:10	10/03/13 00:59	1
Motor Oil (>C24-C36)	0.23	J B	0.24	0.028	mg/L		10/02/13 09:10	10/03/13 00:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				10/02/13 09:10	10/03/13 00:59	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.095	J H B	0.12	0.019	mg/L		10/04/13 12:34	10/07/13 16:17	1
Motor Oil (>C24-C36)	0.085	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 16:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	60		50 - 150				10/04/13 12:34	10/07/13 16:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1B-W-3-091813

Lab Sample ID: 580-40429-44

Date Collected: 09/18/13 14:10

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.070	J B	0.12	0.018	mg/L		10/02/13 09:10	10/03/13 01:16	1
Motor Oil (>C24-C36)	0.13	J B	0.24	0.028	mg/L		10/02/13 09:10	10/03/13 01:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				10/02/13 09:10	10/03/13 01:16	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: MW-3-091813

Lab Sample ID: 580-40429-45

Date Collected: 09/18/13 14:49

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.098	J B	0.12	0.019	mg/L		10/02/13 09:10	10/03/13 01:34	1
Motor Oil (>C24-C36)	0.22	J B	0.25	0.029	mg/L		10/02/13 09:10	10/03/13 01:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	100		50 - 150				10/02/13 09:10	10/03/13 01:34	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.050	J H B	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 16:35	1
Motor Oil (>C24-C36)	0.061	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 16:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	59		50 - 150				10/04/13 12:34	10/07/13 16:35	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-19-091613

Lab Sample ID: 580-40429-46

Date Collected: 09/16/13 14:30

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.040	J B *	0.12	0.019	mg/L		09/26/13 13:15	10/02/13 13:24	1
Motor Oil (>C24-C36)	0.069	J B	0.24	0.028	mg/L		09/26/13 13:15	10/02/13 13:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	60		50 - 150				09/26/13 13:15	10/02/13 13:24	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.035	J H B	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 16:53	1
Motor Oil (>C24-C36)	0.039	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 16:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				10/04/13 12:34	10/07/13 16:53	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-16-091613

Lab Sample ID: 580-40429-47

Date Collected: 09/16/13 15:05

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.044	J B *	0.12	0.018	mg/L		09/26/13 13:15	10/02/13 13:42	1
Motor Oil (>C24-C36)	0.064	J B	0.24	0.028	mg/L		09/26/13 13:15	10/02/13 13:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150				09/26/13 13:15	10/02/13 13:42	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.029	J H B	0.12	0.019	mg/L		10/04/13 12:34	10/07/13 17:11	1
Motor Oil (>C24-C36)	0.030	J H B	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 17:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	66		50 - 150				10/04/13 12:34	10/07/13 17:11	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-56-091613

Lab Sample ID: 580-40429-48

Date Collected: 09/16/13 16:02

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	1.2	* B Y	0.12	0.019	mg/L		09/26/13 13:15	10/02/13 14:00	1
Motor Oil (>C24-C36)	0.48	B Y	0.25	0.028	mg/L		09/26/13 13:15	10/02/13 14:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	61		50 - 150				09/26/13 13:15	10/02/13 14:00	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	1.8	H B Y	0.12	0.018	mg/L		10/04/13 12:34	10/07/13 17:29	1
Motor Oil (>C24-C36)	0.82	H B Y	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 17:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				10/04/13 12:34	10/07/13 17:29	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-55-091613

Lab Sample ID: 580-40429-49

Date Collected: 09/16/13 16:49

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16	* B Y	0.12	0.019	mg/L		09/26/13 13:15	10/02/13 14:18	1
Motor Oil (>C24-C36)	0.25	B Y	0.24	0.028	mg/L		09/26/13 13:15	10/02/13 14:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	60		50 - 150				09/26/13 13:15	10/02/13 14:18	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.22	H B Y	0.12	0.019	mg/L		10/04/13 12:34	10/07/13 17:46	1
Motor Oil (>C24-C36)	0.32	H B Y	0.24	0.028	mg/L		10/04/13 12:34	10/07/13 17:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				10/04/13 12:34	10/07/13 17:46	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-50-091613

Lab Sample ID: 580-40429-50

Date Collected: 09/16/13 17:28

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	1.1	* B Y	0.12	0.019	mg/L		09/26/13 13:15	10/02/13 14:36	1
Motor Oil (>C24-C36)	0.45	B Y	0.24	0.028	mg/L		09/26/13 13:15	10/02/13 14:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	59		50 - 150				09/26/13 13:15	10/02/13 14:36	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	1.6	H B Y	0.12	0.019	mg/L		10/04/13 12:34	10/07/13 18:04	1
Motor Oil (>C24-C36)	0.66	H B Y	0.25	0.029	mg/L		10/04/13 12:34	10/07/13 18:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				10/04/13 12:34	10/07/13 18:04	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-54-091713

Lab Sample ID: 580-40429-51

Date Collected: 09/17/13 08:40

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12	0.019	mg/L		10/01/13 12:49	10/04/13 18:07	1
Motor Oil (>C24-C36)	0.062	J B	0.24	0.028	mg/L		10/01/13 12:49	10/04/13 18:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	89		50 - 150				10/01/13 12:49	10/04/13 18:07	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S4-CD-091713

Lab Sample ID: 580-40429-52

Date Collected: 09/17/13 08:41

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.25	* B Y	0.12	0.018	mg/L		09/30/13 13:47	10/01/13 22:19	1
Motor Oil (>C24-C36)	0.40	B Y	0.24	0.028	mg/L		09/30/13 13:47	10/01/13 22:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150				09/30/13 13:47	10/01/13 22:19	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.14	H Y B	0.12	0.018	mg/L		10/03/13 09:27	10/04/13 16:55	1
Motor Oil (>C24-C36)	0.24	H Y B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 16:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				10/03/13 09:27	10/04/13 16:55	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S4-CU-091713

Lab Sample ID: 580-40429-53

Date Collected: 09/17/13 08:47

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.14	* B Y	0.12	0.018	mg/L		09/30/13 13:47	10/01/13 22:35	1
Motor Oil (>C24-C36)	0.29	B Y	0.24	0.028	mg/L		09/30/13 13:47	10/01/13 22:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				09/30/13 13:47	10/01/13 22:35	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	H Y B	0.12	0.018	mg/L		10/03/13 09:27	10/04/13 17:13	1
Motor Oil (>C24-C36)	0.27	H Y B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 17:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	62		50 - 150				10/03/13 09:27	10/04/13 17:13	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: GW-4-091713

Lab Sample ID: 580-40429-54

Date Collected: 09/17/13 08:57

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10	J B *	0.12	0.018	mg/L		09/30/13 13:47	10/01/13 23:21	1
Motor Oil (>C24-C36)	0.19	J B	0.24	0.028	mg/L		09/30/13 13:47	10/01/13 23:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	71		50 - 150				09/30/13 13:47	10/01/13 23:21	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.13	H Y B	0.12	0.018	mg/L		10/03/13 09:27	10/04/13 17:31	1
Motor Oil (>C24-C36)	0.16	J H B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	74		50 - 150				10/03/13 09:27	10/04/13 17:31	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S4-BD-091713

Lab Sample ID: 580-40429-55

Date Collected: 09/17/13 09:18

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.13	* B Y	0.12	0.018	mg/L		09/30/13 13:47	10/01/13 23:37	1
Motor Oil (>C24-C36)	0.23	J B	0.24	0.028	mg/L		09/30/13 13:47	10/01/13 23:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				09/30/13 13:47	10/01/13 23:37	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.094	J H B	0.12	0.018	mg/L		10/03/13 09:27	10/04/13 17:49	1
Motor Oil (>C24-C36)	0.23	J H B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 17:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				10/03/13 09:27	10/04/13 17:49	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W18-091713

Lab Sample ID: 580-40429-56

Date Collected: 09/17/13 09:20

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16	* B Y	0.12	0.019	mg/L		09/30/13 13:47	10/01/13 23:53	1
Motor Oil (>C24-C36)	0.21	J B	0.25	0.028	mg/L		09/30/13 13:47	10/01/13 23:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				09/30/13 13:47	10/01/13 23:53	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.17	H Y B	0.12	0.018	mg/L		10/03/13 09:27	10/04/13 18:06	1
Motor Oil (>C24-C36)	0.27	H Y B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				10/03/13 09:27	10/04/13 18:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S4-BU-091713

Lab Sample ID: 580-40429-57

Date Collected: 09/17/13 09:34

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16	* B Y	0.12	0.018	mg/L		09/30/13 13:47	10/02/13 00:08	1
Motor Oil (>C24-C36)	0.37	B Y	0.24	0.028	mg/L		09/30/13 13:47	10/02/13 00:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				09/30/13 13:47	10/02/13 00:08	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.15	H Y B	0.12	0.018	mg/L		10/03/13 09:27	10/04/13 18:24	1
Motor Oil (>C24-C36)	0.41	H Y B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				10/03/13 09:27	10/04/13 18:24	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S4-AD-091713

Lab Sample ID: 580-40429-58

Date Collected: 09/17/13 09:55

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11	J B *	0.12	0.018	mg/L		09/30/13 13:47	10/02/13 00:24	1
Motor Oil (>C24-C36)	0.18	J B	0.24	0.028	mg/L		09/30/13 13:47	10/02/13 00:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	77		50 - 150				09/30/13 13:47	10/02/13 00:24	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16	H Y B	0.12	0.018	mg/L		10/03/13 09:27	10/04/13 18:42	1
Motor Oil (>C24-C36)	0.44	H Y B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 18:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	70		50 - 150				10/03/13 09:27	10/04/13 18:42	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1C-W-7-091713

Lab Sample ID: 580-40429-59

Date Collected: 09/17/13 10:05

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	* B Y	0.12	0.018	mg/L		09/30/13 13:47	10/02/13 00:39	1
Motor Oil (>C24-C36)	0.18	J B	0.24	0.028	mg/L		09/30/13 13:47	10/02/13 00:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				09/30/13 13:47	10/02/13 00:39	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.19	H Y B	0.12	0.018	mg/L		10/03/13 09:27	10/04/13 19:00	1
Motor Oil (>C24-C36)	1.5	H Y B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 19:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				10/03/13 09:27	10/04/13 19:00	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-17-091713

Lab Sample ID: 580-40429-60

Date Collected: 09/17/13 10:13

Matrix: Water

Date Received: 09/19/13 16:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.081	J B *	0.12	0.018	mg/L		09/30/13 13:47	10/02/13 00:55	1
Motor Oil (>C24-C36)	0.15	J B	0.24	0.028	mg/L		09/30/13 13:47	10/02/13 00:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	87		50 - 150				09/30/13 13:47	10/02/13 00:55	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.14	H Y B	0.12	0.018	mg/L		10/03/13 09:27	10/04/13 19:53	1
Motor Oil (>C24-C36)	0.82	H Y B	0.24	0.028	mg/L		10/03/13 09:27	10/04/13 19:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	77		50 - 150				10/03/13 09:27	10/04/13 19:53	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-145910/1-A
Matrix: Water
Analysis Batch: 146331

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.0697	J	0.13	0.019	mg/L		09/26/13 13:15	10/02/13 12:31	1
Motor Oil (>C24-C36)	0.149	J	0.25	0.029	mg/L		09/26/13 13:15	10/02/13 12:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	60		50 - 150				09/26/13 13:15	10/02/13 12:31	1

Lab Sample ID: LCS 580-145910/2-A
Matrix: Water
Analysis Batch: 146331

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)	4.00	2.74	*	mg/L		68	70 - 140		
Motor Oil (>C24-C36)	4.00	3.25		mg/L		81	66 - 125		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
<i>o</i> -Terphenyl	81		50 - 150						

Lab Sample ID: LCSD 580-145910/3-A
Matrix: Water
Analysis Batch: 146331

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 145910

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	4.00	2.53	*	mg/L		63	70 - 140	8	27
Motor Oil (>C24-C36)	4.00	3.07		mg/L		77	66 - 125	6	27
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	71		50 - 150						

Lab Sample ID: MB 580-146158/1-A
Matrix: Water
Analysis Batch: 146227

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146158

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.119	J	0.13	0.019	mg/L		09/30/13 13:47	10/01/13 20:14	1
Motor Oil (>C24-C36)	0.211	J	0.25	0.029	mg/L		09/30/13 13:47	10/01/13 20:14	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				09/30/13 13:47	10/01/13 20:14	1

Lab Sample ID: LCS 580-146158/2-A
Matrix: Water
Analysis Batch: 146227

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146158

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)	4.00	2.35	*	mg/L		59	70 - 140		
Motor Oil (>C24-C36)	4.00	2.85		mg/L		71	66 - 125		

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-146158/2-A
Matrix: Water
Analysis Batch: 146227

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146158

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	75		50 - 150

Lab Sample ID: LCSD 580-146158/3-A
Matrix: Water
Analysis Batch: 146227

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146158

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	4.00	2.19	*	mg/L		55	70 - 140	7	27
Motor Oil (>C24-C36)	4.00	2.92		mg/L		73	66 - 125	2	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	74		50 - 150

Lab Sample ID: MB 580-146257/1-A
Matrix: Water
Analysis Batch: 146544

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146257

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.0440	J	0.13	0.019	mg/L		10/01/13 12:49	10/04/13 10:24	1
Motor Oil (>C24-C36)	0.0898	J	0.25	0.029	mg/L		10/01/13 12:49	10/04/13 10:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150	10/01/13 12:49	10/04/13 10:24	1

Lab Sample ID: LCS 580-146257/2-A
Matrix: Water
Analysis Batch: 146544

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	4.00	3.22		mg/L		81	70 - 140
Motor Oil (>C24-C36)	4.00	3.83		mg/L		96	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	91		50 - 150

Lab Sample ID: LCSD 580-146257/3-A
Matrix: Water
Analysis Batch: 146544

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146257

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	4.00	2.90		mg/L		73	70 - 140	10	27
Motor Oil (>C24-C36)	4.00	3.29		mg/L		82	66 - 125	15	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	82		50 - 150

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 580-146344/1-A
Matrix: Water
Analysis Batch: 146331

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146344

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.149		0.13	0.019	mg/L		10/02/13 09:10	10/02/13 17:51	1
Motor Oil (>C24-C36)	0.215	J	0.25	0.029	mg/L		10/02/13 09:10	10/02/13 17:51	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				10/02/13 09:10	10/02/13 17:51	1

Lab Sample ID: LCS 580-146344/2-A
Matrix: Water
Analysis Batch: 146331

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146344

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)	4.00	3.68		mg/L		92	70 - 140		
Motor Oil (>C24-C36)	4.00	4.03		mg/L		101	66 - 125		
Surrogate	%Recovery	LCS Qualifier	Limits						
<i>o</i> -Terphenyl	96		50 - 150						

Lab Sample ID: LCSD 580-146344/3-A
Matrix: Water
Analysis Batch: 146331

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146344

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	4.00	3.81		mg/L		95	70 - 140	3	27
Motor Oil (>C24-C36)	4.00	4.06		mg/L		101	66 - 125	1	27
Surrogate	%Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	96		50 - 150						

Lab Sample ID: MB 580-146444/1-A
Matrix: Water
Analysis Batch: 146589

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.129	J	0.13	0.019	mg/L		10/03/13 09:27	10/04/13 13:56	1
Motor Oil (>C24-C36)	0.300		0.25	0.029	mg/L		10/03/13 09:27	10/04/13 13:56	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				10/03/13 09:27	10/04/13 13:56	1

Lab Sample ID: LCS 580-146444/2-A
Matrix: Water
Analysis Batch: 146589

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)	4.00	3.28		mg/L		82	70 - 140		
Motor Oil (>C24-C36)	4.00	3.77		mg/L		94	66 - 125		

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-146444/2-A
Matrix: Water
Analysis Batch: 146589

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146444

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	86		50 - 150

Lab Sample ID: LCSD 580-146444/3-A
Matrix: Water
Analysis Batch: 146589

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146444

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	4.00	3.22		mg/L		80	70 - 140	2	27
Motor Oil (>C24-C36)	4.00	3.78		mg/L		95	66 - 125	0	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	85		50 - 150

Lab Sample ID: MB 580-146594/1-A
Matrix: Water
Analysis Batch: 146682

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146594

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.0961	J	0.13	0.019	mg/L		10/04/13 12:34	10/07/13 11:49	1
Motor Oil (>C24-C36)	0.104	J	0.25	0.029	mg/L		10/04/13 12:34	10/07/13 11:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150	10/04/13 12:34	10/07/13 11:49	1

Lab Sample ID: LCS 580-146594/2-A
Matrix: Water
Analysis Batch: 146682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 146594

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	4.00	3.06		mg/L		77	70 - 140
Motor Oil (>C24-C36)	4.00	3.73		mg/L		93	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	85		50 - 150

Lab Sample ID: LCSD 580-146594/3-A
Matrix: Water
Analysis Batch: 146682

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 146594

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	4.00	3.10		mg/L		78	70 - 140	1	27
Motor Oil (>C24-C36)	4.00	3.75		mg/L		94	66 - 125	1	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	82		50 - 150

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S2-BD-091713

Lab Sample ID: 580-40429-1

Date Collected: 09/17/13 14:41

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 14:53	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 12:43	JL1	TAL SEA

Client Sample ID: S1-BU-091713

Lab Sample ID: 580-40429-2

Date Collected: 09/17/13 14:45

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 15:11	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 13:01	JL1	TAL SEA

Client Sample ID: 2A-W-41-091713

Lab Sample ID: 580-40429-3

Date Collected: 09/17/13 14:47

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 16:05	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 13:19	JL1	TAL SEA
Total/NA	Prep	3510C	RA		145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	148459	11/01/13 10:45	JL1	TAL SEA

Client Sample ID: S2-BU-091713

Lab Sample ID: 580-40429-4

Date Collected: 09/17/13 14:57

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 16:22	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 13:36	JL1	TAL SEA
Total/NA	Prep	3510C	RA		145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	148459	11/01/13 13:25	JL1	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S1-BD-091713

Lab Sample ID: 580-40429-5

Date Collected: 09/17/13 15:00

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 16:40	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 13:54	JL1	TAL SEA
Total/NA	Prep	3510C	RA		145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	148459	11/01/13 13:43	JL1	TAL SEA

Client Sample ID: S2-AD-091713

Lab Sample ID: 580-40429-6

Date Collected: 09/17/13 15:10

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 11:17	JL1	TAL SEA

Client Sample ID: S2-AU-091713

Lab Sample ID: 580-40429-7

Date Collected: 09/17/13 15:10

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 11:35	JL1	TAL SEA

Client Sample ID: S1-AU-091713

Lab Sample ID: 580-40429-8

Date Collected: 09/17/13 15:15

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 11:53	JL1	TAL SEA

Client Sample ID: S1-AD-091713

Lab Sample ID: 580-40429-9

Date Collected: 09/17/13 15:28

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 12:11	JL1	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1C-W-70-091713

Lab Sample ID: 580-40429-10

Date Collected: 09/17/13 17:00

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 12:28	JL1	TAL SEA

Client Sample ID: 2A-W-420-091713

Lab Sample ID: 580-40429-11

Date Collected: 09/17/13 17:01

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 12:46	JL1	TAL SEA

Client Sample ID: MW-16-091813

Lab Sample ID: 580-40429-12

Date Collected: 09/18/13 09:43

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 19:03	JL1	TAL SEA

Client Sample ID: 1C-W-1-091813

Lab Sample ID: 580-40429-13

Date Collected: 09/18/13 09:47

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 19:20	JL1	TAL SEA

Client Sample ID: EW-1-091813

Lab Sample ID: 580-40429-14

Date Collected: 09/18/13 09:50

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 19:38	JL1	TAL SEA

Client Sample ID: 2A-W-8-091813

Lab Sample ID: 580-40429-15

Date Collected: 09/18/13 09:59

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 19:56	JL1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-170-091713

Lab Sample ID: 580-40429-16

Date Collected: 09/17/13 10:18

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 13:04	JL1	TAL SEA

Client Sample ID: S4-AU-091713

Lab Sample ID: 580-40429-17

Date Collected: 09/17/13 10:17

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 13:57	JL1	TAL SEA

Client Sample ID: 5-W-15-091713

Lab Sample ID: 580-40429-18

Date Collected: 09/17/13 11:11

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/01/13 21:48	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 16:19	JL1	TAL SEA

Client Sample ID: S3-CD-091713

Lab Sample ID: 580-40429-19

Date Collected: 09/17/13 11:17

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/01/13 22:04	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 16:37	JL1	TAL SEA

Client Sample ID: S3-CU-091713

Lab Sample ID: 580-40429-20

Date Collected: 09/17/13 11:30

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 14:15	JL1	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 2A-W-42-091713

Lab Sample ID: 580-40429-21

Date Collected: 09/17/13 11:34

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 14:33	JL1	TAL SEA

Client Sample ID: 5-W-14-091713

Lab Sample ID: 580-40429-22

Date Collected: 09/17/13 11:54

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 14:51	JL1	TAL SEA

Client Sample ID: S3-BD-091713

Lab Sample ID: 580-40429-23

Date Collected: 09/17/13 12:50

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 15:09	JL1	TAL SEA

Client Sample ID: S40-AD-091713

Lab Sample ID: 580-40429-24

Date Collected: 09/17/13 12:34

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 15:27	JL1	TAL SEA

Client Sample ID: S3-BU-091713

Lab Sample ID: 580-40429-25

Date Collected: 09/17/13 13:00

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 15:44	JL1	TAL SEA

Client Sample ID: MW-38R-091713

Lab Sample ID: 580-40429-26

Date Collected: 09/17/13 13:24

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 16:02	JL1	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: GW-3-091713

Lab Sample ID: 580-40429-27

Date Collected: 09/17/13 13:29

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 16:20	JL1	TAL SEA

Client Sample ID: S3-AD-091713

Lab Sample ID: 580-40429-28

Date Collected: 09/17/13 13:50

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 16:38	JL1	TAL SEA

Client Sample ID: S3-AU-091713

Lab Sample ID: 580-40429-29

Date Collected: 09/17/13 13:57

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 17:31	JL1	TAL SEA

Client Sample ID: 2A-W-40-091713

Lab Sample ID: 580-40429-30

Date Collected: 09/17/13 14:27

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 17:49	JL1	TAL SEA

Client Sample ID: 2B-W-4-091813

Lab Sample ID: 580-40429-31

Date Collected: 09/18/13 10:23

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 20:14	JL1	TAL SEA

Client Sample ID: GW-1-091813

Lab Sample ID: 580-40429-32

Date Collected: 09/18/13 10:35

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 20:32	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: GW-1-091813

Lab Sample ID: 580-40429-32

Date Collected: 09/18/13 10:35

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 14:12	JL1	TAL SEA

Client Sample ID: 1C-W-4-091813

Lab Sample ID: 580-40429-33

Date Collected: 09/18/13 10:37

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 21:25	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 14:30	JL1	TAL SEA

Client Sample ID: MW-4-091813

Lab Sample ID: 580-40429-34

Date Collected: 09/18/13 10:57

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 21:43	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 15:24	JL1	TAL SEA

Client Sample ID: EW-2A-091813

Lab Sample ID: 580-40429-35

Date Collected: 09/18/13 11:13

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 22:01	JL1	TAL SEA

Client Sample ID: GW-2-091813

Lab Sample ID: 580-40429-36

Date Collected: 09/18/13 11:22

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 22:19	JL1	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1C-W-3-091813

Lab Sample ID: 580-40429-37

Date Collected: 09/18/13 11:30

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 22:36	JL1	TAL SEA

Client Sample ID: 2A-W-10-091813

Lab Sample ID: 580-40429-38

Date Collected: 09/18/13 11:40

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 22:54	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 15:42	JL1	TAL SEA

Client Sample ID: 1B-W-23-091813

Lab Sample ID: 580-40429-39

Date Collected: 09/18/13 11:48

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 23:12	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 15:59	JL1	TAL SEA

Client Sample ID: 1B-W-230-091813

Lab Sample ID: 580-40429-40

Date Collected: 09/18/13 11:50

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 23:30	JL1	TAL SEA

Client Sample ID: 1A-W-4-091813

Lab Sample ID: 580-40429-41

Date Collected: 09/18/13 12:15

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 23:48	JL1	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 1C-W-8-091813

Lab Sample ID: 580-40429-42

Date Collected: 09/18/13 13:04

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/03/13 00:05	JL1	TAL SEA

Client Sample ID: 1B-W-2-091813

Lab Sample ID: 580-40429-43

Date Collected: 09/18/13 13:43

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/03/13 00:59	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 16:17	JL1	TAL SEA

Client Sample ID: 1B-W-3-091813

Lab Sample ID: 580-40429-44

Date Collected: 09/18/13 14:10

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/03/13 01:16	JL1	TAL SEA

Client Sample ID: MW-3-091813

Lab Sample ID: 580-40429-45

Date Collected: 09/18/13 14:49

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146344	10/02/13 09:10	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/03/13 01:34	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 16:35	JL1	TAL SEA

Client Sample ID: 5-W-19-091613

Lab Sample ID: 580-40429-46

Date Collected: 09/16/13 14:30

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 13:24	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 16:53	JL1	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W-16-091613

Lab Sample ID: 580-40429-47

Date Collected: 09/16/13 15:05

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 13:42	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 17:11	JL1	TAL SEA

Client Sample ID: 5-W-56-091613

Lab Sample ID: 580-40429-48

Date Collected: 09/16/13 16:02

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 14:00	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 17:29	JL1	TAL SEA

Client Sample ID: 5-W-55-091613

Lab Sample ID: 580-40429-49

Date Collected: 09/16/13 16:49

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 14:18	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 17:46	JL1	TAL SEA

Client Sample ID: 5-W-50-091613

Lab Sample ID: 580-40429-50

Date Collected: 09/16/13 17:28

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			145910	09/26/13 13:15	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146331	10/02/13 14:36	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146594	10/04/13 12:34	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146682	10/07/13 18:04	JL1	TAL SEA

Client Sample ID: 5-W-54-091713

Lab Sample ID: 580-40429-51

Date Collected: 09/17/13 08:40

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146257	10/01/13 12:49	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146544	10/04/13 18:07	JL1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: S4-CD-091713

Lab Sample ID: 580-40429-52

Date Collected: 09/17/13 08:41

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/01/13 22:19	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 16:55	JL1	TAL SEA

Client Sample ID: S4-CU-091713

Lab Sample ID: 580-40429-53

Date Collected: 09/17/13 08:47

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/01/13 22:35	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 17:13	JL1	TAL SEA

Client Sample ID: GW-4-091713

Lab Sample ID: 580-40429-54

Date Collected: 09/17/13 08:57

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/01/13 23:21	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 17:31	JL1	TAL SEA

Client Sample ID: S4-BD-091713

Lab Sample ID: 580-40429-55

Date Collected: 09/17/13 09:18

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/01/13 23:37	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 17:49	JL1	TAL SEA

Client Sample ID: 5-W18-091713

Lab Sample ID: 580-40429-56

Date Collected: 09/17/13 09:20

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/01/13 23:53	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Client Sample ID: 5-W18-091713

Lab Sample ID: 580-40429-56

Date Collected: 09/17/13 09:20

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 18:06	JL1	TAL SEA

Client Sample ID: S4-BU-091713

Lab Sample ID: 580-40429-57

Date Collected: 09/17/13 09:34

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/02/13 00:08	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 18:24	JL1	TAL SEA

Client Sample ID: S4-AD-091713

Lab Sample ID: 580-40429-58

Date Collected: 09/17/13 09:55

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/02/13 00:24	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 18:42	JL1	TAL SEA

Client Sample ID: 1C-W-7-091713

Lab Sample ID: 580-40429-59

Date Collected: 09/17/13 10:05

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/02/13 00:39	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 19:00	JL1	TAL SEA

Client Sample ID: 5-W-17-091713

Lab Sample ID: 580-40429-60

Date Collected: 09/17/13 10:13

Matrix: Water

Date Received: 09/19/13 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			146158	09/30/13 13:47	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	146227	10/02/13 00:55	JL1	TAL SEA
Total/NA	Prep	3510C	RE		146444	10/03/13 09:27	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	146589	10/04/13 19:53	JL1	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

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Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40429-1	S2-BD-091713	Water	09/17/13 14:41	09/19/13 16:30
580-40429-2	S1-BU-091713	Water	09/17/13 14:45	09/19/13 16:30
580-40429-3	2A-W-41-091713	Water	09/17/13 14:47	09/19/13 16:30
580-40429-4	S2-BU-091713	Water	09/17/13 14:57	09/19/13 16:30
580-40429-5	S1-BD-091713	Water	09/17/13 15:00	09/19/13 16:30
580-40429-6	S2-AD-091713	Water	09/17/13 15:10	09/19/13 16:30
580-40429-7	S2-AU-091713	Water	09/17/13 15:10	09/19/13 16:30
580-40429-8	S1-AU-091713	Water	09/17/13 15:15	09/19/13 16:30
580-40429-9	S1-AD-091713	Water	09/17/13 15:28	09/19/13 16:30
580-40429-10	1C-W-70-091713	Water	09/17/13 17:00	09/19/13 16:30
580-40429-11	2A-W-420-091713	Water	09/17/13 17:01	09/19/13 16:30
580-40429-12	MW-16-091813	Water	09/18/13 09:43	09/19/13 16:30
580-40429-13	1C-W-1-091813	Water	09/18/13 09:47	09/19/13 16:30
580-40429-14	EW-1-091813	Water	09/18/13 09:50	09/19/13 16:30
580-40429-15	2A-W-8-091813	Water	09/18/13 09:59	09/19/13 16:30
580-40429-16	5-W-170-091713	Water	09/17/13 10:18	09/19/13 16:30
580-40429-17	S4-AU-091713	Water	09/17/13 10:17	09/19/13 16:30
580-40429-18	5-W-15-091713	Water	09/17/13 11:11	09/19/13 16:30
580-40429-19	S3-CD-091713	Water	09/17/13 11:17	09/19/13 16:30
580-40429-20	S3-CU-091713	Water	09/17/13 11:30	09/19/13 16:30
580-40429-21	2A-W-42-091713	Water	09/17/13 11:34	09/19/13 16:30
580-40429-22	5-W-14-091713	Water	09/17/13 11:54	09/19/13 16:30
580-40429-23	S3-BD-091713	Water	09/17/13 12:50	09/19/13 16:30
580-40429-24	S40-AD-091713	Water	09/17/13 12:34	09/19/13 16:30
580-40429-25	S3-BU-091713	Water	09/17/13 13:00	09/19/13 16:30
580-40429-26	MW-38R-091713	Water	09/17/13 13:24	09/19/13 16:30
580-40429-27	GW-3-091713	Water	09/17/13 13:29	09/19/13 16:30
580-40429-28	S3-AD-091713	Water	09/17/13 13:50	09/19/13 16:30
580-40429-29	S3-AU-091713	Water	09/17/13 13:57	09/19/13 16:30
580-40429-30	2A-W-40-091713	Water	09/17/13 14:27	09/19/13 16:30
580-40429-31	2B-W-4-091813	Water	09/18/13 10:23	09/19/13 16:30
580-40429-32	GW-1-091813	Water	09/18/13 10:35	09/19/13 16:30
580-40429-33	1C-W-4-091813	Water	09/18/13 10:37	09/19/13 16:30
580-40429-34	MW-4-091813	Water	09/18/13 10:57	09/19/13 16:30
580-40429-35	EW-2A-091813	Water	09/18/13 11:13	09/19/13 16:30
580-40429-36	GW-2-091813	Water	09/18/13 11:22	09/19/13 16:30
580-40429-37	1C-W-3-091813	Water	09/18/13 11:30	09/19/13 16:30
580-40429-38	2A-W-10-091813	Water	09/18/13 11:40	09/19/13 16:30
580-40429-39	1B-W-23-091813	Water	09/18/13 11:48	09/19/13 16:30
580-40429-40	1B-W-230-091813	Water	09/18/13 11:50	09/19/13 16:30
580-40429-41	1A-W-4-091813	Water	09/18/13 12:15	09/19/13 16:30
580-40429-42	1C-W-8-091813	Water	09/18/13 13:04	09/19/13 16:30
580-40429-43	1B-W-2-091813	Water	09/18/13 13:43	09/19/13 16:30
580-40429-44	1B-W-3-091813	Water	09/18/13 14:10	09/19/13 16:30
580-40429-45	MW-3-091813	Water	09/18/13 14:49	09/19/13 16:30
580-40429-46	5-W-19-091613	Water	09/16/13 14:30	09/19/13 16:30
580-40429-47	5-W-16-091613	Water	09/16/13 15:05	09/19/13 16:30
580-40429-48	5-W-56-091613	Water	09/16/13 16:02	09/19/13 16:30
580-40429-49	5-W-55-091613	Water	09/16/13 16:49	09/19/13 16:30
580-40429-50	5-W-50-091613	Water	09/16/13 17:28	09/19/13 16:30
580-40429-51	5-W-54-091713	Water	09/17/13 08:40	09/19/13 16:30
580-40429-52	S4-CD-091713	Water	09/17/13 08:41	09/19/13 16:30
580-40429-53	S4-CU-091713	Water	09/17/13 08:47	09/19/13 16:30

TestAmerica Seattle



Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

TestAmerica Job ID: 580-40429-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40429-54	GW-4-091713	Water	09/17/13 08:57	09/19/13 16:30
580-40429-55	S4-BD-091713	Water	09/17/13 09:18	09/19/13 16:30
580-40429-56	5-W18-091713	Water	09/17/13 09:20	09/19/13 16:30
580-40429-57	S4-BU-091713	Water	09/17/13 09:34	09/19/13 16:30
580-40429-58	S4-AD-091713	Water	09/17/13 09:55	09/19/13 16:30
580-40429-59	1C-W-7-091713	Water	09/17/13 10:05	09/19/13 16:30
580-40429-60	5-W-17-091713	Water	09/17/13 10:13	09/19/13 16:30





CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

Laboratory: _____ Project Manager: _____
 Address: _____ Phone: _____
 City/State/Zip: _____ Fax: _____
 Project State of Origin: _____
 Project City: **SKYKOMISH**
 Company: **FARALLON CONSULTING**
 Address: **975 5TH AVE NW**
 City/State/Zip: **ISSAQUAH WA 98027**
 Project Number: **683-043**
 Project Manager: **TERRY POTTELE**
 Email: **TPOTTELE@FARALLONCONSULTING.COM**
 Phone: **425 295 0839** Fax: **425 295 0858**
 Tracking Method: _____
 Tracking Number: _____

BNSF Project Name: **BNSF SKYKOMISH**
 BNSF Work Order No.: **ALBONDADATER**
 BNSF Contact: **BOUCE SHEPPARD**
 TURNAROUND TIME: 1-day Rush 5- to 8-day Rush
 2-day Rush Standard 10-Day Level III EDD Req. Format?
 3-day Rush Other _____ Level IV

DELIVERABLES Other Deliverables?
 BNSF Standard (Level II)
 Level III
 Level IV

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered (Y/N)	Type (Comp/Grab)	Matrix	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler						
1 5-2-19-091613	2	9/16/13	1430	JC	N	CAA	ED	NEPT-H-DX	41	
2 5-2-16-091613			1505						47	
3 5-2-56-091613			1602						48	
4 5-2-55-091613			1649						49	
5 5-2-50-091613			1728						50	
6 5-2-54-091713		9/17/13	0840						51	
7 54-CD-091713			0841	RL					52	
8 54-CU-091713			0847	↓					53	
9 6W-4-091713			0857	DK					54	
10 54-BD-091713			0918	RL					55	
11 5-2-18-091713			0922	JC					56	
12 54-BU-091713			0934	RL					57	
13 54-AD-091713			0955	RL					58	
14 1C-2-7-091713			1005	DK					59	
15 5-2-17-091713			1013	JC					60	

Received By: _____ Date/Time: _____
 Relinquished By: _____ Date/Time: _____
 Received By: _____ Date/Time: _____
 Relinquished By: _____ Date/Time: _____
 Received By: _____ Date/Time: _____
 Relinquished By: _____ Date/Time: _____
 Lab Remarks: _____
 Lab Custody Intact? Yes No
 Custody Seal No. _____ BNSF COC No. _____

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES
 DUPLICATE - CONSULTANT
 TAL-1001 (0912)

40419



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

Laboratory: _____ Project Manager: _____
 Address: _____ Phone: _____
 City/State/Zip: _____ Fax: _____
 Project State of Origin: _____
 Project Number: 683-043
 Project Manager: JERRY POTTELE

Project City: SEYKAMISH
 Company: FAARLUD CONSULTING
 Address: 975 5TH AVE NW
 City/State/Zip: ISSAQUAH WA 98027
 Project Manager: JERRY POTTELE
 Phone: 425 295 0839 Fax: 425 295 0850

BNSF Project Name: SEYKAMISH CLOUD WATER
 BNSF Project Order No.: _____
 BNSF Work Order No.: _____

TURNAROUND TIME
 1-day Rush
 2-day Rush
 Standard 10-Day
 3-day Rush
 Other _____

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV
 Other Deliverables?
 EDD Req. Format?

METHODS FOR ANALYSIS

Sample Identification	Containers	Sample Collection			Filtered (Y/N)	Type (Comp/Grab)	Matrix	Comments	LAB USE
		Date	Time	Sampler					
2B-U-4-091813	2	9/18/13	023	JR	N	Cloud	WTPH-D ₁	31	
2B-U-1-091813			035	JC				31	
2B-U-4-091813			037	RL				33	
MU-4-091813			1057	DK				34	
EU-2A-091813			1113	SR				35	
GU-2-091813			1122	JC				34	
AC-U-3-091813			1130	RL				37	
2A-U-10-091813			1140	DK				36	
1B-U-23-091813			1148	SR				34	
1B-U-230-091813			1150	J				40	
1A-U-4-091813			1215	JC				41	
1C-U-8-091813			1304	RL				42	
1B-U-2-091813			1343	JC				43	
1B-U-3-091813			1410	RL				44	
MU-3-091813			1449	JC				45	

Received by Laboratory: _____ Date/Time: _____
 Relinquished By: _____ Date/Time: _____
 Relinquished By: _____ Date/Time: _____
 Relinquished By: _____ Date/Time: _____
 Lab Remarks: _____
 Lab Custody Intact? Yes No
 Custody Seal No. _____ BNSF COC No. _____

Comments and Special Analytical Requirements:



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: **SKYKEMISH** Project City: **SKYKEMISH** Company: **FARALLON CONSULTING** Project Manager: **STEVEY PORTER**

BNSF Project Name: **SKYKEMISH GROUNDWATER** Address: **975 5th Ave NW** Consultant Information: **FARALLON CONSULTING** Project Manager: **STEVEY PORTER**

BNSF Contact: **BRUCE SHEPPARD** BNSF Work Order No.: **ISSAQUAH WA 98072** Email: **SPORT@FARALLONCONSULTING.COM**

TURNAROUND TIME: 1-day Rush 5- to 8-day Rush Standard 10-Day EDD Req. Format? Other Deliverables? Other _____

DELIVERABLES: BNSF Standard (Level II) Level III Level IV Other Deliverables? Other _____

METHODS FOR ANALYSIS

LABORATORY INFORMATION

LAB WORK ORDER: **40119**

SHIPMENT INFORMATION

Project Number: **683-043**

Shipment Method: **TRUCK**

Tracking Number: **425 265 0839**

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered (Y/N)	Type (Comp/Grab)	Matrix	Comments	LAB USE
		Date	Time	Sampler					
1 5-W-170-091713	2	9/17/13	1018	JL	N	GM	GD	X	16
2 54-AU-091713			1017	RL					17
3 5-W-15-091713			1111	JL					18
4 53-CD-091713			1117	RL					19
5 53-CU-091713			1130	RL					20
6 2A-W-42-091713			1134	DK					21
7 5-W-14-091713			1154	JL					22
8 53-BD-091713			1250	RL					23
9 540-AD-091713			1234	RL					24
10 53-BU-091713			1300	RL					25
11 MW-3BR-091713			1324	JL					26
12 GW-3-091713			1329	DK					27
13 53-AD-091713			1350	RL					28
14 53-AU-091713			1357	JL					29
15 2A-W-40-091713			1427	JL					30

Comments and Special Analytical Requirements:

Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: **9/19/13 1630**

Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____

Received by Laboratory: _____ Date/Time: _____ Lab Remarks: _____ Lab Custody Intact? Yes No

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES **DUPLICATE - CONSULTANT** BNSF COC No. _____

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-40429-1

Login Number: 40429

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Analysis not assigned to samples on 2 of the CoCs
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-41010-1

Client Project/Site: BNSF Skykomish Groundwater

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele



Authorized for release by:
11/7/2013 12:00:59 PM

Kristine Allen, Project Manager I
(253)922-2310

kristine.allen@testamericainc.com

LINKS

Review your project
results through
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Have a Question?



Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-41010-1

Job ID: 580-41010-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 10/24/2013 1:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was -0.7° C.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 148461, for the following sample(s) from preparation batch 148412: 1B-W-3-102313 (580-41010-1), 1C-W-70-102313 (580-41010-4), 1C-W-7-102313 (580-41010-3), 1C-W-8-102313 (580-41010-2), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product, motor oil, and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-41010-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-41010-1

Client Sample ID: 1B-W-3-102313

Lab Sample ID: 580-41010-1

Date Collected: 10/23/13 12:20

Matrix: Water

Date Received: 10/24/13 13:20

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.082	Y	0.024		mg/L		10/31/13 12:56	11/01/13 15:11	1
Motor Oil (>C24-C36)	0.061	Y	0.047		mg/L		10/31/13 12:56	11/01/13 15:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				10/31/13 12:56	11/01/13 15:11	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-41010-1

Client Sample ID: 1C-W-8-102313

Lab Sample ID: 580-41010-2

Date Collected: 10/23/13 13:13

Matrix: Water

Date Received: 10/24/13 13:20

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10	Y	0.024		mg/L		10/31/13 12:56	11/01/13 15:29	1
Motor Oil (>C24-C36)	0.096	Y	0.047		mg/L		10/31/13 12:56	11/01/13 15:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				10/31/13 12:56	11/01/13 15:29	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-41010-1

Client Sample ID: 1C-W-7-102313

Lab Sample ID: 580-41010-3

Date Collected: 10/23/13 14:00

Matrix: Water

Date Received: 10/24/13 13:20

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11	Y	0.024		mg/L		10/31/13 12:56	11/01/13 16:23	1
Motor Oil (>C24-C36)	0.095	Y	0.047		mg/L		10/31/13 12:56	11/01/13 16:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				10/31/13 12:56	11/01/13 16:23	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-41010-1

Client Sample ID: 1C-W-70-102313

Lab Sample ID: 580-41010-4

Date Collected: 10/23/13 16:00

Matrix: Water

Date Received: 10/24/13 13:20

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.15	Y	0.024		mg/L		10/31/13 12:56	11/01/13 16:40	1
Motor Oil (>C24-C36)	0.13	Y	0.047		mg/L		10/31/13 12:56	11/01/13 16:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				10/31/13 12:56	11/01/13 16:40	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-41010-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-148412/1-A

Matrix: Water

Analysis Batch: 148461

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 148412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.025		mg/L		10/31/13 12:56	11/01/13 10:27	1
Motor Oil (>C24-C36)	ND		0.050		mg/L		10/31/13 12:56	11/01/13 10:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		50 - 150	10/31/13 12:56	11/01/13 10:27	1

Lab Sample ID: LCS 580-148412/2-A

Matrix: Water

Analysis Batch: 148461

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 148412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.514		mg/L		103	70 - 140
Motor Oil (>C24-C36)	0.500	0.589		mg/L		118	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	106		50 - 150

Lab Sample ID: LCSD 580-148412/3-A

Matrix: Water

Analysis Batch: 148461

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 148412

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.508		mg/L		102	70 - 140	1	27
Motor Oil (>C24-C36)	0.500	0.593		mg/L		119	66 - 125	1	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	104		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-41010-1

Client Sample ID: 1B-W-3-102313

Date Collected: 10/23/13 12:20

Date Received: 10/24/13 13:20

Lab Sample ID: 580-41010-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			148412	10/31/13 12:56	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	148461	11/01/13 15:11	JL1	TAL SEA

Client Sample ID: 1C-W-8-102313

Date Collected: 10/23/13 13:13

Date Received: 10/24/13 13:20

Lab Sample ID: 580-41010-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			148412	10/31/13 12:56	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	148461	11/01/13 15:29	JL1	TAL SEA

Client Sample ID: 1C-W-7-102313

Date Collected: 10/23/13 14:00

Date Received: 10/24/13 13:20

Lab Sample ID: 580-41010-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			148412	10/31/13 12:56	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	148461	11/01/13 16:23	JL1	TAL SEA

Client Sample ID: 1C-W-70-102313

Date Collected: 10/23/13 16:00

Date Received: 10/24/13 13:20

Lab Sample ID: 580-41010-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			148412	10/31/13 12:56	RBL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	148461	11/01/13 16:40	JL1	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-41010-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Groundwater

TestAmerica Job ID: 580-41010-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-41010-1	1B-W-3-102313	Water	10/23/13 12:20	10/24/13 13:20
580-41010-2	1C-W-8-102313	Water	10/23/13 13:13	10/24/13 13:20
580-41010-3	1C-W-7-102313	Water	10/23/13 14:00	10/24/13 13:20
580-41010-4	1C-W-70-102313	Water	10/23/13 16:00	10/24/13 13:20

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-41010-1

Login Number: 41010

List Source: TestAmerica Seattle

List Number: 1

Creator: Balles, Racheal M

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-41365-1

Client Project/Site: BNSF Skykomish Ground Water

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele



Authorized for release by:
12/3/2013 4:36:10 PM

Kristine Allen, Manager of Project Management
(253)922-2310

kristine.allen@testamericainc.com

LINKS

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TotalAccess

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41365-1

Job ID: 580-41365-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 11/20/2013 4:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 150077, for the following sample(s) from preparation batch 149998: 1C-W-70-111913 (580-41365-3), 1C-W-7-111913 (580-41365-2), the results in the #2 Diesel Fuel (C10-C24) range(s) are due primarily to what most closely resembles a mineral/transformer oil range product. The affected analyte range(s) have been Y qualified and reported

In analytical batch 150077, for the following sample(s) from preparation batch 149998: 1C-W-8-111913 (580-41365-4), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due primarily to what most closely resembles a mineral/transformer oil range product. The affected analyte range(s) have been Y qualified and reported

In analytical batch 150077, the method blank for preparation batch 149998 contained Motor Oil (>C24-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41365-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
Y	The chromatographic response resembles a typical fuel pattern.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41365-1

Client Sample ID: 1B-W-3-111913

Lab Sample ID: 580-41365-1

Date Collected: 11/19/13 13:49

Matrix: Water

Date Received: 11/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.045	J	0.12	0.014	mg/L		11/27/13 09:32	12/02/13 11:22	1
Motor Oil (>C24-C36)	0.055	J B	0.24	0.0093	mg/L		11/27/13 09:32	12/02/13 11:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				11/27/13 09:32	12/02/13 11:22	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41365-1

Client Sample ID: 1C-W-7-111913

Lab Sample ID: 580-41365-2

Date Collected: 11/19/13 14:41

Matrix: Water

Date Received: 11/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.26	Y	0.12	0.014	mg/L		11/27/13 09:32	12/02/13 11:38	1
Motor Oil (>C24-C36)	0.16	J B	0.24	0.0093	mg/L		11/27/13 09:32	12/02/13 11:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				11/27/13 09:32	12/02/13 11:38	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41365-1

Client Sample ID: 1C-W-70-111913

Lab Sample ID: 580-41365-3

Date Collected: 11/19/13 14:51

Matrix: Water

Date Received: 11/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.29	Y	0.12	0.014	mg/L		11/27/13 09:32	12/02/13 11:53	1
Motor Oil (>C24-C36)	0.17	J B	0.24	0.0093	mg/L		11/27/13 09:32	12/02/13 11:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				11/27/13 09:32	12/02/13 11:53	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41365-1

Client Sample ID: 1C-W-8-111913

Lab Sample ID: 580-41365-4

Date Collected: 11/19/13 15:44

Matrix: Water

Date Received: 11/20/13 16:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.44	Y	0.12	0.014	mg/L		11/27/13 09:32	12/02/13 12:09	1
Motor Oil (>C24-C36)	0.38	B Y	0.24	0.0093	mg/L		11/27/13 09:32	12/02/13 12:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				11/27/13 09:32	12/02/13 12:09	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41365-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-149998/1-A

Matrix: Water

Analysis Batch: 150077

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 149998

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13	0.015	mg/L		11/27/13 09:32	12/02/13 08:15	1
Motor Oil (>C24-C36)	0.0168	J	0.25	0.0098	mg/L		11/27/13 09:32	12/02/13 08:15	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				11/27/13 09:32	12/02/13 08:15	1

Lab Sample ID: LCS 580-149998/2-A

Matrix: Water

Analysis Batch: 150077

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 149998

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.451		mg/L		90	70 - 140
Motor Oil (>C24-C36)	0.500	0.533		mg/L		107	66 - 125
Surrogate	%Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	86		50 - 150				

Lab Sample ID: LCSD 580-149998/3-A

Matrix: Water

Analysis Batch: 150077

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 149998

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.461		mg/L		92	70 - 140	2	27
Motor Oil (>C24-C36)	0.500	0.552		mg/L		110	66 - 125	3	27
Surrogate	%Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	89		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41365-1

Client Sample ID: 1B-W-3-111913

Lab Sample ID: 580-41365-1

Date Collected: 11/19/13 13:49

Matrix: Water

Date Received: 11/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			149998	11/27/13 09:32	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	150077	12/02/13 11:22	EKK	TAL SEA

Client Sample ID: 1C-W-7-111913

Lab Sample ID: 580-41365-2

Date Collected: 11/19/13 14:41

Matrix: Water

Date Received: 11/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			149998	11/27/13 09:32	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	150077	12/02/13 11:38	EKK	TAL SEA

Client Sample ID: 1C-W-70-111913

Lab Sample ID: 580-41365-3

Date Collected: 11/19/13 14:51

Matrix: Water

Date Received: 11/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			149998	11/27/13 09:32	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	150077	12/02/13 11:53	EKK	TAL SEA

Client Sample ID: 1C-W-8-111913

Lab Sample ID: 580-41365-4

Date Collected: 11/19/13 15:44

Matrix: Water

Date Received: 11/20/13 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			149998	11/27/13 09:32	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	150077	12/02/13 12:09	EKK	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41365-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41365-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-41365-1	1B-W-3-111913	Water	11/19/13 13:49	11/20/13 16:15
580-41365-2	1C-W-7-111913	Water	11/19/13 14:41	11/20/13 16:15
580-41365-3	1C-W-70-111913	Water	11/19/13 14:51	11/20/13 16:15
580-41365-4	1C-W-8-111913	Water	11/19/13 15:44	11/20/13 16:15

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Rush

 Short Hold

Chain of Custody Record

Client Sound Earth Strategies		Client Contact Rob Roberts		Date 20 Nov. 2013	Chain of Custody Number 19397							
Address 2811 Fairview Avenue East Suite 2000		Telephone Number (Area Code)/Fax Number 206.306.1900 / 206.306.1907		Lab Number	Page 1 of 1							
City Seattle	State WA	Zip Code 98102	Sampler L. Namba	Analysis (Attach list if more space is needed)								
Project Name and Location (State) Lesoro - Arlington (02102) Arlington, WA		Billing Contact Anne Duarte	Lab Contact 90 Tesoro	Special Instructions/ Conditions of Receipt								
Contract/Purchase Order/Quote No. 0271-007-15		Matrix	Containers & Preservatives	<input checked="" type="checkbox"/> NMTPH - Gx <input checked="" type="checkbox"/> NMTPH - Bx <input checked="" type="checkbox"/> BTEX by 8260c								
Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH
MW08-20131119	11/19/13	1333	✓	✓								
MW09-20131119	11/19/13	1427	✓	✓								
MW10-20131119	11/19/13	1244	✓	✓								
MW11-20131119	11/19/13	1608	✓	✓								
MW12-20131119	11/19/13	1702	✓	✓								
MW13-20131119	11/19/13	1516	✓	✓								
MW19-20131119	11/19/13	1442	✓	✓								
 580-41365 Chain of Custody												
Cooler		Possible Hazard Identification		Sample Disposal		Disposal By Lab		(A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Archive For	Months				
Turn Around Time Required (business days)		Flammable		Skin Irritant		Poison B		Unknown		Sample Disposal		
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 5 Days	<input type="checkbox"/> 10 Days	<input type="checkbox"/> 15 Days	<input type="checkbox"/> Other	Standard		Return To Client		<input checked="" type="checkbox"/> Cooler/TB Dig IR cor 0.2 unc 0.1 <input type="checkbox"/> Cooler Dsc <input type="checkbox"/> Wet/Packs <input type="checkbox"/> Packing other <input type="checkbox"/> w/o client copy etc		
1. Relinquished By Sign/Print Larry Namba		Date 11/20/13	Time 13:50	QC Requirements (Specify)		1. Received By Sign/Print Larry Namba		Date 11/20/13	Time 13:50			
2. Relinquished By Sign/Print		Date	Time	2. Received By Sign/Print		3. Received By Sign/Print		Date	Time			
3. Relinquished By Sign/Print		Date	Time	3. Received By Sign/Print				Date	Time			
Comments												

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-41365-1

Login Number: 41365

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-41683-1

Client Project/Site: BNSF Skykomish Ground Water

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Gerald Portele



Authorized for release by:
1/2/2014 12:27:27 PM

Kristine Allen, Manager of Project Management
(253)922-2310

kristine.allen@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Job ID: 580-41683-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 12/18/2013 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 0.3° C, 1.1° C, 1.2° C, 1.3° C, 2.4° C, 2.5° C and 5.4° C.

Except:

The last page of the COCs did not have any analysis checked marked off. Samples were logged in according to the analysis on the previous COCs.

GC Semi VOA - Method(s) NWTPH-Dx

Surrogate recovery for the following sample(s) was outside control limits: 1B-W-2-121313 (580-41683-22). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

The following sample(s) contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: 1C-W-4-121313 (580-41683-10), 1C-W-8-121313 (580-41683-5). In addition, there are individual peaks contributing to the overall sample pattern that would need 8270 analysis to identify. The samples have been Y qualified and reported.

The following sample(s) contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: 2A-W-100-121313 (580-41683-12), 2A-W-10-121313 (580-41683-11), 2A-W-41-121313 (580-41683-23), 2A-W-42-121313 (580-41683-24), 5-W-15-121413 (580-41683-29). The samples have been Y qualified and reported.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Y	The chromatographic response resembles a typical fuel pattern.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 2B-W-4-121213

Lab Sample ID: 580-41683-1

Date Collected: 12/12/13 14:05

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.025		0.024	0.014	mg/L		12/24/13 11:05	12/26/13 16:06	1
Motor Oil (>C24-C36)	0.022	J	0.048	0.0093	mg/L		12/24/13 11:05	12/26/13 16:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				12/24/13 11:05	12/26/13 16:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: GW-4-121313

Lab Sample ID: 580-41683-2

Date Collected: 12/13/13 08:42

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10		0.024	0.014	mg/L		12/24/13 11:05	12/26/13 16:24	1
Motor Oil (>C24-C36)	0.12		0.047	0.0093	mg/L		12/24/13 11:05	12/26/13 16:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				12/24/13 11:05	12/26/13 16:24	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: EW-2A-121313

Lab Sample ID: 580-41683-3

Date Collected: 12/13/13 09:20

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.039		0.024	0.014	mg/L		12/24/13 11:05	12/26/13 16:41	1
Motor Oil (>C24-C36)	0.060		0.048	0.0093	mg/L		12/24/13 11:05	12/26/13 16:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				12/24/13 11:05	12/26/13 16:41	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 1C-W-7-121313

Lab Sample ID: 580-41683-4

Date Collected: 12/13/13 09:33

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.099		0.024	0.014	mg/L		12/24/13 11:05	12/26/13 16:59	1
Motor Oil (>C24-C36)	0.11		0.048	0.0093	mg/L		12/24/13 11:05	12/26/13 16:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				12/24/13 11:05	12/26/13 16:59	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 1C-W-8-121313

Lab Sample ID: 580-41683-5

Date Collected: 12/13/13 10:50

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16	Y	0.024	0.014	mg/L		12/24/13 11:05	12/26/13 17:17	1
Motor Oil (>C24-C36)	0.13		0.048	0.0093	mg/L		12/24/13 11:05	12/26/13 17:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	72		50 - 150				12/24/13 11:05	12/26/13 17:17	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 1C-W-80-121313

Lab Sample ID: 580-41683-6

Date Collected: 12/13/13 11:00

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.094		0.024	0.014	mg/L		12/24/13 11:05	12/26/13 17:35	1
Motor Oil (>C24-C36)	0.097		0.047	0.0093	mg/L		12/24/13 11:05	12/26/13 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				12/24/13 11:05	12/26/13 17:35	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: MW-4-121313

Lab Sample ID: 580-41683-7

Date Collected: 12/13/13 11:01

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.095		0.024	0.014	mg/L		12/24/13 11:05	12/26/13 17:53	1
Motor Oil (>C24-C36)	0.23		0.047	0.0093	mg/L		12/24/13 11:05	12/26/13 17:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	75		50 - 150				12/24/13 11:05	12/26/13 17:53	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 5-W-19-121313

Lab Sample ID: 580-41683-8

Date Collected: 12/13/13 11:23

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.015	J	0.024	0.014	mg/L		12/24/13 11:05	12/26/13 18:10	1
Motor Oil (>C24-C36)	0.018	J	0.047	0.0093	mg/L		12/24/13 11:05	12/26/13 18:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	67		50 - 150				12/24/13 11:05	12/26/13 18:10	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 5-W-190-121313

Lab Sample ID: 580-41683-9

Date Collected: 12/13/13 13:19

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.015	J	0.024	0.014	mg/L		12/24/13 11:05	12/26/13 18:28	1
Motor Oil (>C24-C36)	0.016	J	0.048	0.0093	mg/L		12/24/13 11:05	12/26/13 18:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	61		50 - 150				12/24/13 11:05	12/26/13 18:28	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 1C-W-4-121313

Lab Sample ID: 580-41683-10

Date Collected: 12/13/13 11:25

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.13	Y	0.024	0.014	mg/L		12/24/13 11:05	12/26/13 18:46	1
Motor Oil (>C24-C36)	0.11		0.048	0.0094	mg/L		12/24/13 11:05	12/26/13 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				12/24/13 11:05	12/26/13 18:46	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 2A-W-10-121313

Lab Sample ID: 580-41683-11

Date Collected: 12/13/13 11:55

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.21	Y	0.024	0.014	mg/L		12/24/13 12:20	12/26/13 19:39	1
Motor Oil (>C24-C36)	0.37	Y	0.048	0.0093	mg/L		12/24/13 12:20	12/26/13 19:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				12/24/13 12:20	12/26/13 19:39	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 2A-W-100-121313

Lab Sample ID: 580-41683-12

Date Collected: 12/13/13 16:00

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.20	Y	0.024	0.014	mg/L		12/24/13 12:20	12/26/13 19:57	1
Motor Oil (>C24-C36)	0.41	Y	0.048	0.0093	mg/L		12/24/13 12:20	12/26/13 19:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				12/24/13 12:20	12/26/13 19:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 1C-W-1-121313

Lab Sample ID: 580-41683-13

Date Collected: 12/13/13 12:19

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11		0.024	0.014	mg/L		12/24/13 12:20	12/26/13 20:15	1
Motor Oil (>C24-C36)	0.18		0.048	0.0094	mg/L		12/24/13 12:20	12/26/13 20:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				12/24/13 12:20	12/26/13 20:15	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 5-W-16-121313

Lab Sample ID: 580-41683-14

Date Collected: 12/13/13 12:22

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.039		0.024	0.014	mg/L		12/24/13 12:20	12/26/13 20:32	1
Motor Oil (>C24-C36)	0.045	J	0.048	0.0094	mg/L		12/24/13 12:20	12/26/13 20:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				12/24/13 12:20	12/26/13 20:32	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: EW-1-121313

Lab Sample ID: 580-41683-15

Date Collected: 12/13/13 13:11

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.073		0.024	0.014	mg/L		12/24/13 12:20	12/26/13 20:50	1
Motor Oil (>C24-C36)	0.12		0.048	0.0093	mg/L		12/24/13 12:20	12/26/13 20:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				12/24/13 12:20	12/26/13 20:50	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: GW-1-121313

Lab Sample ID: 580-41683-16

Date Collected: 12/13/13 13:33

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.083		0.024	0.014	mg/L		12/26/13 09:48	12/30/13 13:29	1
Motor Oil (>C24-C36)	0.10		0.048	0.0093	mg/L		12/26/13 09:48	12/30/13 13:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				12/26/13 09:48	12/30/13 13:29	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 2A-W-40-121313

Lab Sample ID: 580-41683-17

Date Collected: 12/13/13 14:05

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.043		0.024	0.014	mg/L		12/26/13 09:48	12/30/13 13:47	1
Motor Oil (>C24-C36)	0.031	J	0.047	0.0093	mg/L		12/26/13 09:48	12/30/13 13:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	58		50 - 150				12/26/13 09:48	12/30/13 13:47	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: MW-3-121313

Lab Sample ID: 580-41683-18

Date Collected: 12/13/13 14:25

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.058		0.024	0.014	mg/L		12/26/13 09:48	12/30/13 14:05	1
Motor Oil (>C24-C36)	0.095		0.048	0.0093	mg/L		12/26/13 09:48	12/30/13 14:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				12/26/13 09:48	12/30/13 14:05	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: GW-2-121313

Lab Sample ID: 580-41683-19

Date Collected: 12/13/13 14:33

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.047		0.024	0.014	mg/L		12/26/13 09:48	12/30/13 14:23	1
Motor Oil (>C24-C36)	0.038	J	0.047	0.0093	mg/L		12/26/13 09:48	12/30/13 14:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				12/26/13 09:48	12/30/13 14:23	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 1B-W-3-121313

Lab Sample ID: 580-41683-20

Date Collected: 12/13/13 14:37

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11		0.024	0.014	mg/L		12/26/13 09:48	12/30/13 14:40	1
Motor Oil (>C24-C36)	0.077		0.047	0.0093	mg/L		12/26/13 09:48	12/30/13 14:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				12/26/13 09:48	12/30/13 14:40	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 1B-W-23-121313

Lab Sample ID: 580-41683-21

Date Collected: 12/13/13 15:33

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.033		0.024	0.014	mg/L		12/26/13 09:48	12/31/13 09:07	1
Motor Oil (>C24-C36)	0.040	J	0.047	0.0093	mg/L		12/26/13 09:48	12/31/13 09:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	61		50 - 150				12/26/13 09:48	12/31/13 09:07	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 1B-W-2-121313

Lab Sample ID: 580-41683-22

Date Collected: 12/13/13 15:37

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.058		0.024	0.014	mg/L		12/26/13 09:48	12/31/13 09:25	1
Motor Oil (>C24-C36)	0.082		0.047	0.0093	mg/L		12/26/13 09:48	12/31/13 09:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	32	X	50 - 150				12/26/13 09:48	12/31/13 09:25	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 2A-W-41-121313

Lab Sample ID: 580-41683-23

Date Collected: 12/13/13 16:20

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.14	Y	0.024	0.014	mg/L		12/26/13 09:48	12/31/13 09:42	1
Motor Oil (>C24-C36)	0.14		0.048	0.0094	mg/L		12/26/13 09:48	12/31/13 09:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	68		50 - 150				12/26/13 09:48	12/31/13 09:42	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 2A-W-42-121313

Lab Sample ID: 580-41683-24

Date Collected: 12/13/13 16:25

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.20	Y	0.024	0.014	mg/L		12/26/13 09:48	12/31/13 10:00	1
Motor Oil (>C24-C36)	0.17		0.047	0.0093	mg/L		12/26/13 09:48	12/31/13 10:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				12/26/13 09:48	12/31/13 10:00	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: GW-3-121313

Lab Sample ID: 580-41683-25

Date Collected: 12/13/13 16:42

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.043		0.024	0.014	mg/L		12/26/13 09:48	12/31/13 10:18	1
Motor Oil (>C24-C36)	0.046	J	0.047	0.0093	mg/L		12/26/13 09:48	12/31/13 10:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	60		50 - 150				12/26/13 09:48	12/31/13 10:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 5-W-14-121413

Lab Sample ID: 580-41683-26

Date Collected: 12/14/13 08:00

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.023	J	0.024	0.014	mg/L		12/26/13 09:48	12/31/13 10:36	1
Motor Oil (>C24-C36)	0.027	J	0.048	0.0094	mg/L		12/26/13 09:48	12/31/13 10:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	61		50 - 150				12/26/13 09:48	12/31/13 10:36	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 5-W-17-121413

Lab Sample ID: 580-41683-27

Date Collected: 12/14/13 08:37

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.070		0.024	0.014	mg/L		12/26/13 09:48	12/31/13 10:54	1
Motor Oil (>C24-C36)	0.084		0.048	0.0093	mg/L		12/26/13 09:48	12/31/13 10:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				12/26/13 09:48	12/31/13 10:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 5-W-18-121413

Lab Sample ID: 580-41683-28

Date Collected: 12/14/13 09:42

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11		0.024	0.014	mg/L		12/26/13 09:48	12/31/13 11:11	1
Motor Oil (>C24-C36)	0.13		0.048	0.0094	mg/L		12/26/13 09:48	12/31/13 11:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				12/26/13 09:48	12/31/13 11:11	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 5-W-15-121413

Lab Sample ID: 580-41683-29

Date Collected: 12/14/13 10:31

Matrix: Water

Date Received: 12/18/13 16:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.34	Y	0.024	0.014	mg/L		12/26/13 09:48	12/31/13 11:29	1
Motor Oil (>C24-C36)	0.33	Y	0.048	0.0094	mg/L		12/26/13 09:48	12/31/13 11:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				12/26/13 09:48	12/31/13 11:29	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-151287/1-A

Matrix: Water

Analysis Batch: 151333

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 151287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.025	0.015	mg/L		12/24/13 11:05	12/26/13 13:44	1
Motor Oil (>C24-C36)	ND		0.050	0.0098	mg/L		12/24/13 11:05	12/26/13 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	58		50 - 150	12/24/13 11:05	12/26/13 13:44	1

Lab Sample ID: LCS 580-151287/2-A

Matrix: Water

Analysis Batch: 151333

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 151287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.420		mg/L		84	70 - 140
Motor Oil (>C24-C36)	0.500	0.522		mg/L		104	66 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	82		50 - 150

Lab Sample ID: LCSD 580-151287/3-A

Matrix: Water

Analysis Batch: 151333

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 151287

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.416		mg/L		83	70 - 140	1	27
Motor Oil (>C24-C36)	0.500	0.500		mg/L		100	66 - 125	4	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	82		50 - 150

Lab Sample ID: MB 580-151328/1-A

Matrix: Water

Analysis Batch: 151416

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 151328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.025	0.015	mg/L		12/26/13 09:48	12/30/13 12:36	1
Motor Oil (>C24-C36)	ND		0.050	0.0098	mg/L		12/26/13 09:48	12/30/13 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150	12/26/13 09:48	12/30/13 12:36	1

Lab Sample ID: LCS 580-151328/2-A

Matrix: Water

Analysis Batch: 151416

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 151328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.421		mg/L		84	70 - 140
Motor Oil (>C24-C36)	0.500	0.422		mg/L		84	66 - 125

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-151328/2-A

Matrix: Water

Analysis Batch: 151416

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 151328

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	78		50 - 150

Lab Sample ID: LCSD 580-151328/3-A

Matrix: Water

Analysis Batch: 151416

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 151328

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.441		mg/L		88	70 - 140	5	27
Motor Oil (>C24-C36)	0.500	0.441		mg/L		88	66 - 125	4	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	82		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 2B-W-4-121213

Lab Sample ID: 580-41683-1

Date Collected: 12/12/13 14:05

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 11:05	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 16:06	CGM	TAL SEA

Client Sample ID: GW-4-121313

Lab Sample ID: 580-41683-2

Date Collected: 12/13/13 08:42

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 11:05	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 16:24	CGM	TAL SEA

Client Sample ID: EW-2A-121313

Lab Sample ID: 580-41683-3

Date Collected: 12/13/13 09:20

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 11:05	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 16:41	CGM	TAL SEA

Client Sample ID: 1C-W-7-121313

Lab Sample ID: 580-41683-4

Date Collected: 12/13/13 09:33

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 11:05	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 16:59	CGM	TAL SEA

Client Sample ID: 1C-W-8-121313

Lab Sample ID: 580-41683-5

Date Collected: 12/13/13 10:50

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 11:05	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 17:17	CGM	TAL SEA

Client Sample ID: 1C-W-80-121313

Lab Sample ID: 580-41683-6

Date Collected: 12/13/13 11:00

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 11:05	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 17:35	CGM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: MW-4-121313

Lab Sample ID: 580-41683-7

Date Collected: 12/13/13 11:01

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 11:05	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 17:53	CGM	TAL SEA

Client Sample ID: 5-W-19-121313

Lab Sample ID: 580-41683-8

Date Collected: 12/13/13 11:23

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 11:05	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 18:10	CGM	TAL SEA

Client Sample ID: 5-W-190-121313

Lab Sample ID: 580-41683-9

Date Collected: 12/13/13 13:19

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 11:05	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 18:28	CGM	TAL SEA

Client Sample ID: 1C-W-4-121313

Lab Sample ID: 580-41683-10

Date Collected: 12/13/13 11:25

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 11:05	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 18:46	CGM	TAL SEA

Client Sample ID: 2A-W-10-121313

Lab Sample ID: 580-41683-11

Date Collected: 12/13/13 11:55

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 12:20	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 19:39	CGM	TAL SEA

Client Sample ID: 2A-W-100-121313

Lab Sample ID: 580-41683-12

Date Collected: 12/13/13 16:00

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 12:20	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 19:57	CGM	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: 1C-W-1-121313

Lab Sample ID: 580-41683-13

Date Collected: 12/13/13 12:19

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 12:20	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 20:15	CGM	TAL SEA

Client Sample ID: 5-W-16-121313

Lab Sample ID: 580-41683-14

Date Collected: 12/13/13 12:22

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 12:20	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 20:32	CGM	TAL SEA

Client Sample ID: EW-1-121313

Lab Sample ID: 580-41683-15

Date Collected: 12/13/13 13:11

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151287	12/24/13 12:20	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151333	12/26/13 20:50	CGM	TAL SEA

Client Sample ID: GW-1-121313

Lab Sample ID: 580-41683-16

Date Collected: 12/13/13 13:33

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151416	12/30/13 13:29	CGM	TAL SEA

Client Sample ID: 2A-W-40-121313

Lab Sample ID: 580-41683-17

Date Collected: 12/13/13 14:05

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151416	12/30/13 13:47	CGM	TAL SEA

Client Sample ID: MW-3-121313

Lab Sample ID: 580-41683-18

Date Collected: 12/13/13 14:25

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151416	12/30/13 14:05	CGM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: GW-2-121313

Lab Sample ID: 580-41683-19

Date Collected: 12/13/13 14:33

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151416	12/30/13 14:23	CGM	TAL SEA

Client Sample ID: 1B-W-3-121313

Lab Sample ID: 580-41683-20

Date Collected: 12/13/13 14:37

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151416	12/30/13 14:40	CGM	TAL SEA

Client Sample ID: 1B-W-23-121313

Lab Sample ID: 580-41683-21

Date Collected: 12/13/13 15:33

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151474	12/31/13 09:07	CGM	TAL SEA

Client Sample ID: 1B-W-2-121313

Lab Sample ID: 580-41683-22

Date Collected: 12/13/13 15:37

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151474	12/31/13 09:25	CGM	TAL SEA

Client Sample ID: 2A-W-41-121313

Lab Sample ID: 580-41683-23

Date Collected: 12/13/13 16:20

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151474	12/31/13 09:42	CGM	TAL SEA

Client Sample ID: 2A-W-42-121313

Lab Sample ID: 580-41683-24

Date Collected: 12/13/13 16:25

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151474	12/31/13 10:00	CGM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Client Sample ID: GW-3-121313

Lab Sample ID: 580-41683-25

Date Collected: 12/13/13 16:42

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151474	12/31/13 10:18	CGM	TAL SEA

Client Sample ID: 5-W-14-121413

Lab Sample ID: 580-41683-26

Date Collected: 12/14/13 08:00

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151474	12/31/13 10:36	CGM	TAL SEA

Client Sample ID: 5-W-17-121413

Lab Sample ID: 580-41683-27

Date Collected: 12/14/13 08:37

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151474	12/31/13 10:54	CGM	TAL SEA

Client Sample ID: 5-W-18-121413

Lab Sample ID: 580-41683-28

Date Collected: 12/14/13 09:42

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151474	12/31/13 11:11	CGM	TAL SEA

Client Sample ID: 5-W-15-121413

Lab Sample ID: 580-41683-29

Date Collected: 12/14/13 10:31

Matrix: Water

Date Received: 12/18/13 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			151328	12/26/13 09:48	ALC	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	151474	12/31/13 11:29	CGM	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

TestAmerica Job ID: 580-41683-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-41683-1	2B-W-4-121213	Water	12/12/13 14:05	12/18/13 16:00
580-41683-2	GW-4-121313	Water	12/13/13 08:42	12/18/13 16:00
580-41683-3	EW-2A-121313	Water	12/13/13 09:20	12/18/13 16:00
580-41683-4	1C-W-7-121313	Water	12/13/13 09:33	12/18/13 16:00
580-41683-5	1C-W-8-121313	Water	12/13/13 10:50	12/18/13 16:00
580-41683-6	1C-W-80-121313	Water	12/13/13 11:00	12/18/13 16:00
580-41683-7	MW-4-121313	Water	12/13/13 11:01	12/18/13 16:00
580-41683-8	5-W-19-121313	Water	12/13/13 11:23	12/18/13 16:00
580-41683-9	5-W-190-121313	Water	12/13/13 13:19	12/18/13 16:00
580-41683-10	1C-W-4-121313	Water	12/13/13 11:25	12/18/13 16:00
580-41683-11	2A-W-10-121313	Water	12/13/13 11:55	12/18/13 16:00
580-41683-12	2A-W-100-121313	Water	12/13/13 16:00	12/18/13 16:00
580-41683-13	1C-W-1-121313	Water	12/13/13 12:19	12/18/13 16:00
580-41683-14	5-W-16-121313	Water	12/13/13 12:22	12/18/13 16:00
580-41683-15	EW-1-121313	Water	12/13/13 13:11	12/18/13 16:00
580-41683-16	GW-1-121313	Water	12/13/13 13:33	12/18/13 16:00
580-41683-17	2A-W-40-121313	Water	12/13/13 14:05	12/18/13 16:00
580-41683-18	MW-3-121313	Water	12/13/13 14:25	12/18/13 16:00
580-41683-19	GW-2-121313	Water	12/13/13 14:33	12/18/13 16:00
580-41683-20	1B-W-3-121313	Water	12/13/13 14:37	12/18/13 16:00
580-41683-21	1B-W-23-121313	Water	12/13/13 15:33	12/18/13 16:00
580-41683-22	1B-W-2-121313	Water	12/13/13 15:37	12/18/13 16:00
580-41683-23	2A-W-41-121313	Water	12/13/13 16:20	12/18/13 16:00
580-41683-24	2A-W-42-121313	Water	12/13/13 16:25	12/18/13 16:00
580-41683-25	GW-3-121313	Water	12/13/13 16:42	12/18/13 16:00
580-41683-26	5-W-14-121413	Water	12/14/13 08:00	12/18/13 16:00
580-41683-27	5-W-17-121413	Water	12/14/13 08:37	12/18/13 16:00
580-41683-28	5-W-18-121413	Water	12/14/13 09:42	12/18/13 16:00
580-41683-29	5-W-15-121413	Water	12/14/13 10:31	12/18/13 16:00

41683



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: _____
 BNSF Project Name: _____
 BNSF Contact: _____

TURNAROUND TIME
 1-day Rush
 5- to 8-day Rush
 2-day Rush
 Standard 10-Day
 3-day Rush
 Other: _____

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV
 Other Deliverables?

METHODS FOR ANALYSIS
 EDD Req. Formal?
 Other: _____

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Type (Comp/Grab)	Maint
		Date	Time	Sampler		
1 2B-W-4-121213	2	12/12/13	1405	AS	N	G
2 GW-4-121313		12/13/13	0842	AB		
3 EW-2A-121313		12/13/13	0920	AS		
4 1C-W-7-121313		12/13/13	0933	AB		
5 1C-W-8-121313		12/13/13	1050	AB		
6 1C-W-80-121313		12/13/13	1100	AB		
7 MW-4-121313		12/13/13	1101	DK		
8 5-W-19-121313		12/13/13	1123	RL		
9 5-W-190-121313		12/13/13	1319	RL		
10 1C-W-4-121313		12/13/13	1125	AS		
11 2A-W-10-121313		12/13/13	1155	DK		
12 2A-W-100-121313		12/13/13	1100	DK		
13 1C-W-1-121313		12/13/13	1219	AB		
14 5-W-16-121313		12/13/13	1222	RL		
15 EW-1-121313	7	12/13/13	1311	DK	Y	Y

Date/Time Received By: 12/18/13 1600
 Date/Time Relinquished By: _____
 Date/Time Received By: _____
 Date/Time Relinquished By: _____
 Date/Time Received By: _____
 Date/Time Relinquished By: _____

LABORATORY INFORMATION
 Laboratory: _____
 Address: _____
 City/State/Zip: _____
 Project State of Origin: _____
 Project City: _____

CONSULTANT INFORMATION
 Company: **FARALON**
 Address: **975 5TH AVE NW**
 City/State/Zip: **ISSAQUAH WA 98027**

SHIPMENT INFORMATION
 Shipment Method: _____
 Tracking Number: _____
 Project Number: **683-043**
 Project Manager: **JERRY PORTELE**
 Email: **JPORTELE@FARALONCONSULTING.COM**
 Phone: **425-245-0800**
 Fax: **425-296-0850**

Comments	LAB USE
	-1
	-2
	-3
	-4
	-5
	-6
	-7
	-8
	-9
	-10
	-11
	-12
	-13
	-14
	-15



580-41683 Chain of Custody

Comments and Special Analytical Requirements:

DUPLICATE - CONSULTANT

TAL-1001 (06/08)



41683

BNSF RAILWAY
CHAIN OF CUSTODY
BNSF PROJECT INFORMATION

LABORATORY INFORMATION
Project Manager: [Blank]
Address: [Blank]
City/State/Zip: [Blank]

SHIPMENT INFORMATION
Shipment Method: [Blank]
Tracking Number: [Blank]
Project Number: 6083-043

CONSULTANT INFORMATION
Company: FARALLON
Address: 925 5TH AVE NW
City/State/Zip: ISSAQUAH WA 98027
Project Manager: JERRY PORTELE
Email: JPORTELE@FARALLONCONSULTING.COM
Phone: 425 745-0800 Fax: 425 296 0850

BNSF Project Information
BNSF Project Name: [Blank]
BNSF Contact: [Blank]
BNSF Work Order No.: [Blank]

TURNAROUND TIME
 1-day Rush
 5- to 8-day Rush
 2-day Rush
 Standard 10-Day
 3-day Rush
 Other

DELIVERABLES
 BNSF Standard (Level I)
 Level III
 Level IV
 Other Deliverables?

METHODS FOR ANALYSIS
 NUTPH-Dx

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	LAB USE
		Date	Time	Sampler				
1 GW-1-121313	2	12/13/13	1333	RL	N	G	W	-16
2 ZA-W-40-121313		12/13/13	1405	DK				-17
3 MW-3-121313		12/13/13	1425	AS				-18
4 GW-2-121313		12/13/13	1433	RL				-19
5 1B-W-3-121313		12/13/13	1437	AB				-20
6 1B-W-23-121313		12/13/13	1533	RL				-21
7 1B-W-2-121313		12/13/13	1537	AB				-22
8 ZA-W-42-121313		12/13/13	1625	AB				-23
9 2A-W-41-121313		12/13/13	1620	AS				-24
10 2A-W-42-121313		12/13/13	1625	AB				-25
11 GW-3-121313	1	12/13/13	1642	RL				

Comments and Special Analytical Requirements:

Date/Time Received By: 12/18/13 1600
 Date/Time Received By: [Blank]
 Date/Time Received By: [Blank]
 Date/Time Received By: [Blank]

Lab: Custody Intact? Yes No
 BNSF COC No.: [Blank]
 Custody Seal No.: [Blank]

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES
 DUPLICATE - CONSULTANT



41683

BNSF RAILWAY
CHAIN OF CUSTODY

LABORATORY INFORMATION
Project Manager: _____
Phone: _____
City/State/ZIP: _____

SHIPMENT INFORMATION
Shipment Method: _____
Tracking Number: _____

CONSULTANT INFORMATION
Company: FARALLON
Address: 975 5th AVE NW
City/State/ZIP: ISSAQUAH WA 98027
Project Manager: JERRY PORTELE
Phone: _____
Fax: _____

BNSF PROJECT INFORMATION
BNSF Project Number: 683-043
BNSF Project Name: _____
BNSF Contact: _____

TURNAROUND TIME
 1-day Rush
 5- to 8-day Rush
 2-day Rush
 Standard 10-Day
 3-day Rush
 Other _____

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV
 Other Deliverables?
 EDD Req. Format?

METHODS FOR ANALYSIS

Sample Identification	Containers	Sample Collection	Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE	
		Date	Time	Sampler				
5-W-14-121413	2	12/14/13	0800	RL	N	G	W	-26
5-W-17-121413	2	12/14/13	0837	RL	N	G	W	-27
5-W-18-121413	2	12/14/13	0942	RL	N	G	W	-28
5-W-15-121413	2	12/14/13	1031	RL	N	G	W	-29

SAMPLE INFORMATION

7 Cooler/TB Dig/IR cor 1.2^{unc} 1.1¹⁰ Cooler/TB Dig/IR cor 5.4^{unc} 5.4^{unc} Cooler/TB Dig/IR cor 0.3^{unc} 0.2^{unc} Cooler/TB Dig/IR cor 2.4^{unc} 2.3^{unc}
 8 Cooler Dsc 1.5 Blue/W/1.1@ Lab 1600 Cooler Dsc 1.4 Green/1.1@ Lab 1600 Cooler Dsc 1.4 Green/1.1@ Lab 1600
 9 Wet/Packs Packing Bubble w/o A2 Wet/Packs Packing Bubble w/o A2
 10
 11
 12 Cooler/TB Dig/IR cor 1.3^{unc} 1.2^{unc} Cooler/TB Dig/IR cor 7.5^{unc} 7.4^{unc} Cooler/TB Dig/IR cor 1.1^{unc} 1.0^{unc}
 13 Cooler Dsc 1.5 Green/1.1@ Lab 1600 Cooler Dsc 1.4 Green/1.1@ Lab 1600
 14 Wet/Packs Packing Bubble w/o A2 Wet/Packs Packing Bubble w/o A2
 15

Comments and Special Analytical Requirements:
 Relinquished By: _____
 Date/Time: 12/18/13 1600
 Relinquished By: _____
 Date/Time: _____
 Relinquished By: _____
 Date/Time: _____
 Received By: _____
 Date/Time: _____
 Lab Remarks: _____
 Lab Custody In tact? Yes No
 Custody Seal No. _____
 BNSF COC No. _____

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-41683-1

Login Number: 41683

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Analyses listed on COC; individual samples not designated for specific analyses
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**APPENDIX B
DATA VALIDATION REPORTS**

2013 SITE-WIDE
GROUNDWATER MONITORING REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-043

Sayer Data Solutions, Inc.

DATA VALIDATION REPORT



Skykomish Groundwater Monitoring January – March 2013 Data

Prepared for:
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, Washington 98027

July 8, 2013

1.0 Introduction

The following samples were validated:

Sample ID	Sample Date	Sample Time	Lab ID	Analysis
Air Samples				
012913-DK	01/29/13	08:48	L1301917-01	APH. TO-15
DK-022113	02/21/13	08:58	L1303424-01	APH. TO-15
DK-032113	03/21/13	08:25	L1304910-01	APH. TO-15
Water Samples				
1C-W-8-012913	01/29/2013	10:40	1302025-001	NWTPH-Dx
1C-W-1-012913	01/29/2013	11:28	1302025-002	NWTPH-Dx
1C-W-7-012913	01/29/2013	11:55	1302025-003	NWTPH-Dx
1C-W-70-012913	01/29/2013	17:00	1302025-004	NWTPH-Dx
S4CD-022113	02/21/2013	13:30	580-37181-1	NWTPH-Dx
S4CU-022113	02/21/2013	13:50	580-37181-2	NWTPH-Dx
S4BD-022113	02/21/2013	14:05	580-37181-3	NWTPH-Dx
S4BU-022113	02/21/2013	14:25	580-37181-4	NWTPH-Dx
S40BU-022113	02/21/2013	14:30	580-37181-5	NWTPH-Dx
S4AD-022113	02/21/2013	14:45	580-37181-6	NWTPH-Dx
S4AU-022113	02/21/2013	15:15	580-37181-7	NWTPH-Dx
S3CD-022113	02/21/2013	15:29	580-37181-8	NWTPH-Dx
S3CU-022113	02/21/2013	15:37	580-37181-9	NWTPH-Dx
S3BD-022113	02/21/2013	15:56	580-37181-10	NWTPH-Dx
S3BU-022113	02/21/2013	16:05	580-37181-11	NWTPH-Dx
S3AD-022113	02/21/2013	16:19	580-37181-12	NWTPH-Dx
S30AD-022113	02/21/2013	16:25	580-37181-13	NWTPH-Dx
S3AU-022113	02/21/2013	16:37	580-37181-14	NWTPH-Dx
S2BD-022113	02/21/2013	16:57	580-37181-15	NWTPH-Dx
S2BU-022113	02/21/2013	17:10	580-37181-16	NWTPH-Dx
S20BU-022113	02/21/2013	17:20	580-37181-17	NWTPH-Dx
S2AD-022113	02/21/2013	17:24	580-37181-18	NWTPH-Dx
S2AU-022113	02/21/2013	17:30	580-37181-19	NWTPH-Dx
S1BD-022113	02/21/2013	17:46	580-37181-20	NWTPH-Dx
S1BU-022113	02/21/2013	18:09	580-37181-21	NWTPH-Dx

Sample ID	Sample Date	Sample Time	Lab ID	Analysis
S1AD-022113	02/21/2013	18:15	580-37181-22	NWTPH-Dx
S1AU-022113	02/21/2013	18:30	580-37181-23	NWTPH-Dx
1C-W-7-022113	02/21/2013	10:45	580-37181-24	NWTPH-Dx
1C-W-70-022113	02/21/2013	10:59	580-37181-25	NWTPH-Dx
1C-W-8-022113	02/21/2013	11:30	580-37181-26	NWTPH-Dx
1C-W-1-022113	02/21/2013	12:00	580-37181-27	NWTPH-Dx
MW-30-031913	03/19/2013	19:59	580-37663-1	NWTPH-Dx
S4-CD-031913	03/19/2013	08:23	580-37663-2	NWTPH-Dx
S4-CU-031913	03/19/2013	08:26	580-37663-3	NWTPH-Dx
S4-BD-031913	03/19/2013	08:36	580-37663-4	NWTPH-Dx
S4-BU-031913	03/19/2013	08:47	580-37663-5	NWTPH-Dx
S4-AD-031913	03/19/2013	08:53	580-37663-6	NWTPH-Dx
5-W-19-0-031913	03/19/2013	08:55	580-37663-7	NWTPH-Dx
5-W-19-031913	03/19/2013	08:55	580-37663-8	NWTPH-Dx
S4-AU-031913	03/19/2013	09:05	580-37663-9	NWTPH-Dx
S3-CU-031913	03/19/2013	09:57	580-37663-10	NWTPH-Dx
5-W-18-031913	03/19/2013	10:05	580-37663-11	NWTPH-Dx
S3-CD-031913	03/19/2013	10:15	580-37663-12	NWTPH-Dx
S3-AD-031913	03/19/2013	10:19	580-37663-13	NWTPH-Dx
S3-AU-031913	03/19/2013	10:33	580-37663-14	NWTPH-Dx
S3-BU-031913	03/19/2013	10:38	580-37663-15	NWTPH-Dx
5-W-16-031913	03/19/2013	10:40	580-37663-16	NWTPH-Dx
S3-BD-031913	03/19/2013	10:52	580-37663-17	NWTPH-Dx
5-W-17-031913	03/19/2013	11:30	580-37663-18	NWTPH-Dx
S2-BU-031913	03/19/2013	11:30	580-37663-19	NWTPH-Dx
2S-AU-031913	03/19/2013	11:33	580-37663-20	NWTPH-Dx
2S-AD-031913	03/19/2013	11:44	580-37663-21	NWTPH-Dx
S2-BD-031913	03/19/2013	11:45	580-37663-22	NWTPH-Dx
S1-AU-031913	03/19/2013	12:17	580-37663-23	NWTPH-Dx
S1-BU-031913	03/19/2013	12:21	580-37663-24	NWTPH-Dx
S1-AD-031913	03/19/2013	12:30	580-37663-25	NWTPH-Dx
S1-BD-031913	03/19/2013	12:30	580-37663-26	NWTPH-Dx
5-W-15-031913	03/19/2013	13:05	580-37663-27	NWTPH-Dx
5-W-14-031913	03/19/2013	13:50	580-37663-28	NWTPH-Dx
MW-38R-031913	03/19/2013	14:45	580-37663-29	NWTPH-Dx
MW-4-031913	03/19/2013	14:50	580-37663-30	NWTPH-Dx
2A-W-9-031913	03/19/2013	15:00	580-37663-31	NWTPH-Dx
5-W-55-031913	03/19/2013	15:35	580-37663-32	NWTPH-Dx
MW-3-031913	03/19/2013	15:55	580-37663-33	NWTPH-Dx
2A-W-10-031913	03/19/2013	16:00	580-37663-34	NWTPH-Dx
5-W-54-031913	03/19/2013	16:35	580-37663-35	NWTPH-Dx
540-AD-031913	03/19/2013	16:59	580-37663-36	NWTPH-Dx
2B-W-4-031913	03/19/2013	17:04	580-37663-37	NWTPH-Dx
MW-16-031913	03/19/2013	18:00	580-37663-38	NWTPH-Dx
5-W-50-031913	03/19/2013	18:29	580-37663-39	NWTPH-Dx
2A-W-40-031913	03/19/2013	18:50	580-37663-40	NWTPH-Dx
5-W-56-031913	03/19/2013	19:26	580-37663-41	NWTPH-Dx
GW-2-031913	03/19/2013	19:40	580-37663-42	NWTPH-Dx
2A-W-420-032013	03/20/2013	01:11	580-37663-43	NWTPH-Dx
GW-1-032013	03/20/2013	09:20	580-37663-44	NWTPH-Dx
EW-1-032013	03/20/2013	09:30	580-37663-45	NWTPH-Dx
1A-W-4-032013	03/20/2013	09:40	580-37663-46	NWTPH-Dx
1B-W-23-032013	03/20/2013	10:24	580-37663-47	NWTPH-Dx
2-A-41-032013	03/20/2013	10:25	580-37663-48	NWTPH-Dx
1B-W-3-032013	03/20/2013	11:40	580-37663-49	NWTPH-Dx
GW-3-032013	03/20/2013	12:00	580-37663-50	NWTPH-Dx
2A-W-42-032013	03/20/2013	12:01	580-37663-51	NWTPH-Dx
1B-W-2-032013	03/20/2013	12:40	580-37663-52	NWTPH-Dx

Sample ID	Sample Date	Sample Time	Lab ID	Analysis
GW-4-032013	03/20/2013	13:00	580-37663-53	NWTPH-Dx
EW-A2-032013	03/20/2013	13:22	580-37663-54	NWTPH-Dx
1C-W-3-032013	03/20/2013	14:05	580-37663-55	NWTPH-Dx
1C-W-4-032013	03/20/2013	14:15	580-37663-56	NWTPH-Dx
1B-W-230-032013	03/20/2013	19:59	580-37663-57	NWTPH-Dx
1C-W-7-032113	03/21/2013	09:50	580-37663-58	NWTPH-Dx
1C-W-8-032113	03/21/2013	10:29	580-37663-59	NWTPH-Dx
1C-W-1-032113	03/21/2013	11:00	580-37663-61	NWTPH-Dx
1C-W-70-032113	03/21/2013	19:54	580-37663-62	NWTPH-Dx

The monthly samples for January were subcontracted by Pace Analytical to Fremont Analytical of Seattle, Washington. The monthly, quarterly, and semi-annual samples collected in February and March were analyzed by Test America, Tacoma, Washington.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Kathy J. Gunderson, Senior Quality Assurance Chemist, EarthCon Consultants, Inc, Raymond, Washington, and Cari Saylor of Saylor Data Solutions, Inc.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative. Data qualifiers are listed in section 6.0 below.

Test America mislabeled sample 2-A-41-032013 as 2-A-41-302013 in report 580-37663. The correct field sample ID is used throughout this report.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: Monthly sampling currently includes samples from three water sample locations and one air sample location. Quarterly sampling includes 22 additional water sample locations, and semi-annual sampling includes 32 additional water samples.

With two exceptions, all intended samples were collected and the required analysis was completed by the laboratory for each collected sample. Water samples were not collected from locations 5-W-43 or 5-W-51.

Analysis methods: Water samples were analyzed by method NWTPH-Dx and prepared by method SW3510. Air samples were analyzed by EPA method TO-15 SIM and MA-DEP method APH. These methods are approved EPA methods and therefore meet comparability requirements.

Precision, accuracy and completeness: Precision and accuracy measurements were within laboratory control limits. Estimated qualifiers were assigned based on elevated sample receipt temperatures and blank contamination caused elevated reporting limits in some samples. Except for multiple analysis results that were replaced, no data were rejected.

Data completeness was tabulated as follows:

Analysis	# Intended Samples	# Completed Samples	% Completeness
NWTPH-Dx	92	90	98%
T0-15SIM	3	3	100%
APH	3	3	100%
Total, all analyses	98	96	98%

The overall data completeness of 98% meets the project goal of 90%.

3.0 Diesel Range Petroleum Hydrocarbon Analysis - Water

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

Each batch in the Fremont Analytical report included a method blank, LCS, and laboratory duplicate, as well as appropriate surrogates. Test America reported a method blank, laboratory control sample duplicates (LCSDs), and surrogate with each batch. Laboratory duplicates were analyzed but were not reported because non-project samples were utilized. Data qualifiers are not assigned based on the lack of reported laboratory duplicate.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. All samples were extracted and analyzed within holding time.

Laboratory blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration. Fremont Analytical method blanks were free of petroleum hydrocarbons above the PQL.

Diesel #2 (C₁₀-C₂₄) and/or motor oil (>C₂₄-C₃₆) were detected in the method blanks associated with the February and March samples at a level below the PQL as listed below:

Method Blank Batch	Report	Analyte	Concentration (mg/L)
130859	580-37181	#2 Diesel (C10-C24)	0.0498
130860	580-37181	Motor Oil (>C24-C36)	0.0405
132527	580-37663	Motor Oil (>C24-C36)	0.067
132767	580-37663	Motor Oil (>C24-C36)	0.0408
132770	580-37663	#2 Diesel (C10-C24)	0.0337
132770	580-37663	Motor Oil (>C24-C36)	0.0531
132764	580-37663	#2 Diesel (C10-C24)	0.0351
132764	580-37663	Motor Oil (>C24-C36)	0.0447

Sample results less than five times the method blank level should be considered not detected at the reported concentration and are qualified "U". Samples results which are below both the PQL and the five times action level are qualified as both estimated and not detected "UJ".

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits.

LCS recoveries: Laboratory control limits ranged from 65-135% to 70-149%. LCS recoveries were within limits.

LCS/LCSD RPDs: The laboratory control limit was <27%. LCS/LCSD RPD values were within limits.

Laboratory duplicate RPDs: The laboratory control limit was <30%. Laboratory duplicate RPDs were within limits.

Field duplicate RPDs: For concentrations below five times the reporting limits, concentrations were within +/- two times the reporting limit. For concentrations above five times the reporting limit, RPDs were below 50%.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met for samples with no hydrocarbons detected. However, several sample results considered not detected due to blank contamination had elevated reporting limits. The following elevated reporting limits exceeded 0.1 mg/L:

Sample ID	Analyte	Result	Units
5-W-56-031913	Motor Oil (>C24-C36)	0.19	mg/l
1B-W-23-032013	Motor Oil (>C24-C36)	0.12	mg/l
1B-W-3-032013	Motor Oil (>C24-C36)	0.12	mg/l
1C-W-3-032013	Motor Oil (>C24-C36)	0.11	mg/l
1C-W-7-032113	Motor Oil (>C24-C36)	0.2	mg/l
2-A-41-302013	Motor Oil (>C24-C36)	0.13	mg/l
1B-W-2-032013	#2 Diesel (C10-C24)	0.11	mg/l
2A-W-40-031913	Motor Oil (>C24-C36)	0.11	mg/l
MW-38R-031913	Motor Oil (>C24-C36)	0.13	mg/l
EW-1-032013	Motor Oil (>C24-C36)	0.14	mg/l
EW-A2-032013	Motor Oil (>C24-C36)	0.21	mg/l
GW-1-032013	Motor Oil (>C24-C36)	0.22	mg/l
GW-1-032013	#2 Diesel (C10-C24)	0.13	mg/l
GW-2-031913	#2 Diesel (C10-C24)	0.11	mg/l
GW-2-031913	Motor Oil (>C24-C36)	0.14	mg/l
GW-3-032013	Motor Oil (>C24-C36)	0.11	mg/l
GW-4-032013	#2 Diesel (C10-C24)	0.15	mg/l
5-W-18-031913	Motor Oil (>C24-C36)	0.18	mg/l
S4CU-022113	#2 Diesel (C10-C24)	0.18	mg/l
S4BU-022113	#2 Diesel (C10-C24)	0.12	mg/l
1C-W-8-022113	Motor Oil (>C24-C36)	0.16	mg/l
1C-W-7-022113	Motor Oil (>C24-C36)	0.13	mg/l
1C-W-1-022113	Motor Oil (>C24-C36)	0.11	mg/l
S1BU-022113	Motor Oil (>C24-C36)	0.12	mg/l
S2BU-022113	#2 Diesel (C10-C24)	0.18	mg/l

No qualifiers are added based on exceeding reporting limit goals.

Laboratory narrative and flags: The following item was addressed in the laboratory narrative:

The case narrative for Test America report 580-37663 states that the diesel and motor oil hydrocarbons were detected in three associated continuing calibration blanks (CCBs) at levels between the MDL and the reporting limit. Low level concentrations of diesel and motor oil are already qualified due to method blank contamination and no further qualifiers are required.

The case narrative for Test America report 580-37663 states that the temperature of the cooler containing samples 5-W-50-031913, 1A-W-4-032013, 1B-W-3-032013, 1B-W-2-032013, and 1C-W-4-032013 was 8°C the time of sample receipt, exceeding the required range of 2 to 6°C. Positive and non-detect results in these samples are qualified as estimated.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as qualified.

4.0 Petroleum Hydrocarbon Analysis - Air

Quality control analysis frequencies: The method specifies that a method blank, a laboratory control sample, and a laboratory duplicate must be analyzed once per 24 hour batch.

Each batch included a method blank, LCS, and laboratory duplicate.

Holding times: Air samples must be analyzed within 30 days of sampling. All analyses were analyzed within holding time.

Laboratory blank results: Criteria for blanks are that analyte concentrations must be below the PQL or below 5% of the lowest associated sample concentration. Naphthalene and C12 hydrocarbons can be < 2 times the PQL. No target analytes were detected in the method blanks.

LCS recoveries: LCS recoveries were within the method specified range of 50-150% for naphthalene and 70-130% limits for all other compounds.

Laboratory duplicate RPDs: Duplicate RPDs were within the method specified limit of <30%.

Multiple analysis results: Three analytes, 1,3-Butadiene, Benzene, and Naphthalene, were analyzed by method TO-15 in order to achieve lower reporting limits. None of these three analytes were detected in the APH analysis of any sample. The higher reporting limit APH results have been qualified "R2", replaced by the TO-15 results.

Laboratory narrative and flags: No additional qualifiers were assigned based on a review of the laboratory narrative or data flags.

The case narrative for the February report (L1303424) states that the pre- and post-flow controller calibration check RPD is 27, which is above the laboratory's criteria of 20. This issue was discussed with Alpha Analytical to determine the affect on data quality. The pre- and post-flow controller calibration is critical when samples, usually indoor air, are collected over a specified time period. The imprecise flow controller calibration does not affect bulk outdoor air samples when the canister pressure remains negative. Since the sample DK-022113 canister was under vacuum when

received at the laboratory, data quality is unaffected and data qualifiers are not required.

Except for multiple analysis results that were replaced, air petroleum hydrocarbon data are acceptable for use as reported.

5.0 Volatile Organic Analysis - Air

Quality control analysis frequencies: The method specifies that a method blank, a laboratory control sample, and a laboratory duplicate must be analyzed once per 24 hour batch.

Each batch included a method blank, LCS, and laboratory duplicate.

Holding times: Air samples must be analyzed within 30 days of sampling. All samples were analyzed within holding time.

Laboratory blank results: Criteria for blanks are that analyte concentrations must be below the PQL or below 5% of the lowest associated sample concentration. No target analytes were detected in the method blanks.

LCS recoveries: LCS recoveries were within the method specified range of 50-150% for naphthalene and 70-130% limits for all other compounds.

Laboratory duplicate RPDs: Duplicate RPDs were within the method specified limit of <30%.

Laboratory narrative and flags: No additional qualifiers were assigned based on a review of the laboratory narrative or data flags.

The case narrative for the February report (L1303424) states that the pre- and post-flow controller calibration check RPD is 27, which is above the laboratory's criteria of 20. This issue was discussed with Alpha Analytical to determine the effect on data quality. The pre- and post-flow controller calibration is critical when samples, usually indoor air, are collected over a specified time period. The imprecise flow controller calibration does not affect bulk outdoor air samples when the canister pressure remains negative. Since the sample DK-022113 canister was under vacuum when received at the laboratory, data quality is unaffected and data qualifiers are not required.

Air volatile organic data are acceptable for use as reported.

6.0 Validation Qualifiers

Sample ID	Analyte(s)	Qualifier	Reason
Petroleum Hydrocarbon Analyses - Air			
011913-DK	1,3-Butadiene, Benzene, Naphthalene	R2	Result available from another method
DK-022113	1,3-Butadiene, Benzene, Naphthalene	R2	Result available from another method
DK-032113	1,3-Butadiene, Benzene, Naphthalene	R2	Result available from another method

Sample ID	Analyte(s)	Qualifier	Reason
Petroleum Hydrocarbon Analyses - Water			
1A-W-4-032013	#2 Diesel (C10-C24)	UJ	Result < 5X the method blank level Preservation temperature > 6°C
1A-W-4-032013	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level Preservation temperature > 6°C
1B-W-2-032013	#2 Diesel (C10-C24)	UJ	Result < 5X the method blank level Preservation temperature > 6°C
1B-W-2-032013	Motor Oil (>C24-C36)	J	Preservation temperature > 6°C
1B-W-230-032013	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
1B-W-230-032013	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
1B-W-23-032013	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
1B-W-23-032013	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
1B-W-3-032013	#2 Diesel (C10-C24)	UJ	Result < 5X the method blank level Preservation temperature > 6°C
1B-W-3-032013	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level Preservation temperature > 6°C
1C-W-1-022113	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
1C-W-1-032113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
1C-W-1-032113	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
1C-W-3-032013	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
1C-W-3-032013	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
1C-W-4-032013	#2 Diesel (C10-C24)	J	Preservation temperature > 6°C
1C-W-4-032013	Motor Oil (>C24-C36)	J	Preservation temperature > 6°C
1C-W-70-022113	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
1C-W-70-032113	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
1C-W-7-022113	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
1C-W-7-032113	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
1C-W-8-022113	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
2-A-41-032013	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
2-A-41-032013	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
2A-W-40-031913	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
2B-W-4-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
2S-AD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
2S-AU-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
540-AD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
5-W-14-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
5-W-16-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
5-W-17-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
5-W-18-031913	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
5-W-19-0-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
5-W-19-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
5-W-50-031913	#2 Diesel (C10-C24)	J	Preservation temperature > 6°C
5-W-50-031913	Motor Oil (>C24-C36)	J	Preservation temperature > 6°C
5-W-54-031913	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
5-W-55-031913	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
5-W-56-031913	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
5-W-56-031913	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
EW-1-032013	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
EW-1-032013	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
EW-A2-032013	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
EW-A2-032013	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
GW-1-032013	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
GW-1-032013	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
GW-2-031913	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
GW-2-031913	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
GW-3-032013	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
GW-3-032013	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
GW-4-032013	#2 Diesel (C10-C24)	U	Result < 5X the method blank level

Sample ID	Analyte(s)	Qualifier	Reason
MW-16-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
MW-30-0319 13	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
MW-3-031913	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
MW-38R-031913	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
S1AD-022113	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S1-AD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S1AU-022113	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S1-AU-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S1BD-022113	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S1-BD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S1BU-022113	Motor Oil (>C24-C36)	U	Result < 5X the method blank level
S1-BU-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S20BU-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S2AD-022113	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S2AU-022113	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S2BD-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S2-BD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S2BU-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S2-BU-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S30AD-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S3AD-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S3-AD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S3AU-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S3-AU-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S3BD-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S3-BD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S3BU-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S3-BU-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S3CD-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S3-CD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S3CU-022113	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S3-CU-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S40BU-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S4AD-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S4-AD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S4AU-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S4-AU-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S4BD-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S4-BD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S4BU-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S4-BU-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S4CD-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S4-CD-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level
S4CU-022113	#2 Diesel (C10-C24)	U	Result < 5X the method blank level
S4-CU-031913	Motor Oil (>C24-C36)	UJ	Result < 5X the method blank level

7.0 Abbreviations and Definitions

DV Qualifier

U

Definition

The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.

J

The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.

<u>DV Qualifier</u>	<u>Definition</u>
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike
MSD	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

8.0 References

USEPA Contract Laboratory Program National Functional Guidelines For Superfund Organic Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency, June 2008, USEPA-540-R-008-01.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.

Sayer Data Solutions, Inc.

DATA VALIDATION REPORT



Skykomish Groundwater Monitoring April – June 2013 Data

Prepared for:
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, Washington 98027

July 17, 2013

1.0 Introduction

The following water samples were validated:

Sample ID	Sample Date/ Time	Lab ID	Analysis
1C-W-1-042913	04/29/13 14:05	580-38258-1	NWTPH-Dx
1C-W-70-042913	04/29/13 15:59	580-38258-4	NWTPH-Dx
1C-W-7-042913	04/29/13 15:25	580-38258-3	NWTPH-Dx
1C-W-8-042913	04/29/13 14:50	580-38258-2	NWTPH-Dx
1C-W-1-052113	05/21/13 10:33	580-38606-1	NWTPH-Dx
1C-W-70-052113	05/21/13 12:21	580-38606-4	NWTPH-Dx
1C-W-7-052113	05/21/13 12:16	580-38606-3	NWTPH-Dx
1C-W-8-052113	05/21/13 11:26	580-38606-2	NWTPH-Dx
1B-W-23-061813	06/18/13 16:47	580-39011-20	NWTPH-Dx
1C-W-1-061813	06/18/13 11:25	580-39011-8	NWTPH-Dx
1C-W-70-061813	06/18/13 16:00	580-39011-17	NWTPH-Dx
1C-W-7-061813	06/18/13 13:59	580-39011-12	NWTPH-Dx
1C-W-8-061813	06/18/13 12:13	580-39011-10	NWTPH-Dx
2A-W-100-061913	06/19/13 16:00	580-39011-27	NWTPH-Dx
2A-W-10-061913	06/19/13 12:26	580-39011-24	NWTPH-Dx
2A-W-40-061913	06/19/13 09:53	580-39011-22	NWTPH-Dx
2A-W-41-061913	06/19/13 08:48	580-39011-21	NWTPH-Dx
2A-W-42-061813	06/18/13 15:00	580-39011-14	NWTPH-Dx
2A-W-9-061913	06/19/13 10:53	580-39011-23	NWTPH-Dx
2B-W-4-061813	06/18/13 13:40	580-39011-11	NWTPH-Dx
5-W-14-061813	06/18/13 14:20	580-39011-13	NWTPH-Dx
5-W-15-061813	06/18/13 12:00	580-39011-9	NWTPH-Dx
5-W-160-061813	06/18/13 10:30	580-39011-6	NWTPH-Dx
5-W-16-061813	06/18/13 10:30	580-39011-5	NWTPH-Dx
5-W-17-061813	06/18/13 11:15	580-39011-7	NWTPH-Dx
5-W-18-061813	06/18/13 09:45	580-39011-3	NWTPH-Dx
5-W-19-061813	06/18/13 08:55	580-39011-1	NWTPH-Dx

Sample ID	Sample Date/ Time	Lab ID	Analysis
EW-1-061813	06/18/13 15:00	580-39011-15	NWTPH-Dx
EW-2A-061813	06/18/13 09:15	580-39011-2	NWTPH-Dx
GW-1-061813	06/18/13 15:45	580-39011-16	NWTPH-Dx
GW-2-061813	06/18/13 16:30	580-39011-19	NWTPH-Dx
GW-3-061813	06/18/13 16:07	580-39011-18	NWTPH-Dx
GW-4-061813	06/18/13 10:15	580-39011-4	NWTPH-Dx
MW-3-061913	06/19/13 16:10	580-39011-26	NWTPH-Dx
MW-4-061913	06/19/13 15:03	580-39011-25	NWTPH-Dx

Samples were analyzed by Test America, Tacoma, Washington.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Saylor.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative. Data qualifiers are listed in section 4.0 below.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: Monthly sampling currently includes samples from three water sample locations. Quarterly sampling includes 22 additional water sample locations, and semi-annual sampling includes 32 additional water samples. This round of sampling includes monthly and quarterly locations.

With one exception, all intended samples were collected and the required analysis was completed by the laboratory for each collected sample. No sample was collected from location 5-W-43.

Analysis methods: Samples were analyzed by method NWTPH-Dx and prepared by method SW3510C. These methods are approved EPA methods and therefore meet comparability requirements.

Precision, accuracy and completeness: Precision and accuracy measurements were within laboratory control limits. Blank contamination caused elevated reporting limits in some samples. Except for multiple analysis results that were replaced, no data were rejected.

A data completeness of 97% was calculated based on 30 of 31 intended sample analyses completed. This meets the project goal of 90%.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

Each batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCSD), as well as appropriate surrogates. Laboratory duplicates may have been analyzed but not reported because non-project samples were utilized. Data qualifiers are not required due to a lack of reported laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. All samples were extracted and analyzed within holding time.

Laboratory blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration. Fremont Analytical method blanks were free of petroleum hydrocarbons above the PQL.

Diesel #2 (C₁₀-C₂₄) and/or motor oil (>C₂₄-C₃₆) were detected in the method blanks at a level below the RL as listed below:

Blank ID	Analyte	Concentration (mg/L)	RL (mg/L)
MB 580-138415/1-A	#2 Diesel (C10-C24)	0.0161J	0.025
MB 580-138415/1-A	Motor Oil (>C24-C36)	0.0175J	0.050
MB 580-138547/1-A	Motor Oil (>C24-C36)	0.0126J	0.050
MB 580-138547/1-A	#2 Diesel (C10-C24)	0.0172J	0.025
MB 580-134760/1-A	Motor Oil (>C24-C36)	0.0528J	0.10
MB 580-135323/1-A	Motor Oil (>C24-C36)	0.0261J	0.10
MB 580-136560/1-A	Motor Oil (>C24-C36)	0.0314J	0.10

Sample results less than five times the method blank level should be considered not detected at the reported concentration and are qualified "U". Samples results which are below both the PQL and the five times action level are qualified as both estimated and not detected "UJ".

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits.

LCS recoveries: Laboratory control limits ranged from 65-125% to 70-140%. LCS recoveries were within limits.

LCS/LCSD RPDs: The laboratory control limit was <27%. LCS/LCSD RPD values were within limits.

Field duplicate RPDs: For concentrations below five times the reporting limits, concentrations were within +/- two times the reporting limit. For concentrations above five times the reporting limit, RPDs were below 50%.

Multiple analysis results: April samples were re-analyzed and re-reported at the request of the client. The level of motor oil detected in the method blank was lower in the reanalysis. The original results should be used for diesel and the reanalysis results should be used for motor oil.

According to the laboratory narrative, the closing CCV standard associated with EW-1-061813 and GW-1-061813 had recoveries above the upper control limits for motor oil. These two samples were reanalyzed with a passing standard. The laboratory reported the original results for diesel and the reanalysis results for motor oil and no further qualification is necessary.

Results not selected for use are qualified “R1”, replaced by another analysis.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met for samples with no hydrocarbons detected. However, the following two sample results considered not detected due to blank contamination had reporting limits elevated above 0.1 mg/L:

Sample ID	Analyte	Elevated RL (mg/L)	Target RL (mg/L)
1C-W-7-052113	Motor Oil (>C24-C36)	0.11	0.1
1C-W-7-042913	Motor Oil (>C24-C36)	0.11	0.1

No qualifiers are added based on exceeding reporting limit goals.

Laboratory narrative and flags: No additional qualifiers were added based on a review of the laboratory narratives.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as qualified.

4.0 Validation Qualifiers

Sample ID	Analyte(s)	Qualifier	Reason
1B-W-23-061813	#2 Diesel (C10-C24)	U	Blank Contamination
1C-W-1-042913	Motor Oil (>C24-C36)	R1	Replaced by another analysis
1C-W-1-042913 RE	#2 Diesel (C10-C24)	R1	Replaced by another analysis
1C-W-1-042913 RE	Motor Oil (>C24-C36)	UJ	Blank Contamination
1C-W-1-052113	Motor Oil (>C24-C36)	UJ	Blank Contamination
1C-W-1-061813	#2 Diesel (C10-C24)	U	Blank Contamination
1C-W-1-061813	Motor Oil (>C24-C36)	UJ	Blank Contamination
1C-W-70-042913	Motor Oil (>C24-C36)	R1	Replaced by another analysis
1C-W-70-042913 RE	#2 Diesel (C10-C24)	R1	Replaced by another analysis
1C-W-70-042913 RE	Motor Oil (>C24-C36)	U	Blank Contamination
1C-W-70-052113	Motor Oil (>C24-C36)	U	Blank Contamination
1C-W-70-061813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	U	Blank Contamination
1C-W-7-042913	Motor Oil (>C24-C36)	R1	Replaced by another analysis
1C-W-7-042913 RE	#2 Diesel (C10-C24)	R1	Replaced by another analysis
1C-W-7-042913 RE	Motor Oil (>C24-C36)	U	Blank Contamination
1C-W-7-052113	Motor Oil (>C24-C36)	U	Blank Contamination
1C-W-7-061813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	U	Blank Contamination
1C-W-8-042913	Motor Oil (>C24-C36)	R1	Replaced by another analysis
1C-W-8-042913 RE	#2 Diesel (C10-C24)	R1	Replaced by another analysis
2A-W-40-061913	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
2A-W-41-061913	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	U	Blank Contamination
2B-W-4-061813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination

Sample ID	Analyte(s)	Qualifier	Reason
5-W-14-061813	#2 Diesel (C10-C24)	U	Blank Contamination
5-W-14-061813	Motor Oil (>C24-C36)	UJ	Blank Contamination
5-W-160-061813	#2 Diesel (C10-C24)	U	Blank Contamination
5-W-160-061813	Motor Oil (>C24-C36)	UJ	Blank Contamination
5-W-16-061813	#2 Diesel (C10-C24)	U	Blank Contamination
5-W-16-061813	Motor Oil (>C24-C36)	UJ	Blank Contamination
5-W-17-061813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
5-W-19-061813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	U	Blank Contamination
EW-1-061813	#2 Diesel (C10-C24)	U	Blank Contamination
EW-1-061813	Motor Oil (>C24-C36)	U	Blank Contamination
EW-2A-061813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	U	Blank Contamination
GW-1-061813	#2 Diesel (C10-C24)	U	Blank Contamination
GW-2-061813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	U	Blank Contamination
GW-3-061813	#2 Diesel (C10-C24)	U	Blank Contamination
GW-3-061813	Motor Oil (>C24-C36)	UJ	Blank Contamination
GW-4-061813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	U	Blank Contamination
MW-3-061913	#2 Diesel (C10-C24)	U	Blank Contamination

5.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike
MSD	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference

<u>Abbreviation</u>	<u>Definition</u>
RSD	Relative standard deviation

6.0 References

USEPA Contract Laboratory Program National Functional Guidelines For Superfund Organic Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency, June 2008, USEPA-540-R-008-01.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.

Sayer Data Solutions, Inc.

DATA VALIDATION REPORT



Skykomish Groundwater Monitoring July –September 2013 Data

Prepared for:
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, Washington 98027

January 20, 2014

1.0 Introduction

The following water samples were validated:

Sample ID	Sample Date/ Time	Lab ID	Analysis
1B-W-3-073113	07/31/13 14:32	580-39582-4	NWTPH-Dx
1C-W-70-073113	07/31/13 16:00	580-39582-3	NWTPH-Dx
1C-W-7-073113	07/31/13 13:06	580-39582-2	NWTPH-Dx
1C-W-8-073113	07/31/13 12:19	580-39582-1	NWTPH-Dx
1B-W-3-082613	08/26/13 16:15	580-39977-4	NWTPH-Dx
1C-W-70-082613	08/26/13 16:00	580-39977-3	NWTPH-Dx
1C-W-7-082613	08/26/13 14:50	580-39977-2	NWTPH-Dx
1C-W-8-082613	08/26/13 14:10	580-39977-1	NWTPH-Dx
1A-W-4-091813	09/18/13 12:15	580-40429-41	NWTPH-Dx
1B-W-2-091813	09/18/13 13:43	580-40429-43	NWTPH-Dx
1B-W-230-091813	09/18/13 11:50	580-40429-40	NWTPH-Dx
1B-W-23-091813	09/18/13 11:48	580-40429-39	NWTPH-Dx
1B-W-3-091813	09/18/13 14:10	580-40429-44	NWTPH-Dx
1C-W-1-091813	09/18/13 09:47	580-40429-13	NWTPH-Dx
1C-W-3-091813	09/18/13 11:30	580-40429-37	NWTPH-Dx
1C-W-4-091813	09/18/13 10:37	580-40429-33	NWTPH-Dx
1C-W-70-091713	09/17/13 17:00	580-40429-10	NWTPH-Dx
1C-W-7-091713	09/17/13 10:05	580-40429-59	NWTPH-Dx
1C-W-8-091813	09/18/13 13:04	580-40429-42	NWTPH-Dx
2A-W-10-091813	09/18/13 11:40	580-40429-38	NWTPH-Dx
2A-W-40-091713	09/17/13 14:27	580-40429-30	NWTPH-Dx
2A-W-41-091713	09/17/13 14:47	580-40429-3	NWTPH-Dx
2A-W-420-091713	09/17/13 17:01	580-40429-11	NWTPH-Dx
2A-W-42-091713	09/17/13 11:34	580-40429-21	NWTPH-Dx
2A-W-8-091813	09/18/13 09:59	580-40429-15	NWTPH-Dx
2B-W-4-091813	09/18/13 10:23	580-40429-31	NWTPH-Dx
5-W-14-091713	09/17/13 11:54	580-40429-22	NWTPH-Dx

Sample ID	Sample Date/ Time	Lab ID	Analysis
5-W-15-091713	09/17/13 11:11	580-40429-18	NWTPH-Dx
5-W-16-091613	09/16/13 15:05	580-40429-47	NWTPH-Dx
5-W-170-091713	09/17/13 10:18	580-40429-16	NWTPH-Dx
5-W-17-091713	09/17/13 10:13	580-40429-60	NWTPH-Dx
5-W18-091713	09/17/13 09:20	580-40429-56	NWTPH-Dx
5-W-19-091613	09/16/13 14:30	580-40429-46	NWTPH-Dx
5-W-50-091613	09/16/13 17:28	580-40429-50	NWTPH-Dx
5-W-54-091713	09/17/13 08:40	580-40429-51	NWTPH-Dx
5-W-55-091613	09/16/13 16:49	580-40429-49	NWTPH-Dx
5-W-56-091613	09/16/13 16:02	580-40429-48	NWTPH-Dx
EW-1-091813	09/18/13 09:50	580-40429-14	NWTPH-Dx
EW-2A-091813	09/18/13 11:13	580-40429-35	NWTPH-Dx
GW-1-091813	09/18/13 10:35	580-40429-32	NWTPH-Dx
GW-2-091813	09/18/13 11:22	580-40429-36	NWTPH-Dx
GW-3-091713	09/17/13 13:29	580-40429-27	NWTPH-Dx
GW-4-091713	09/17/13 08:57	580-40429-54	NWTPH-Dx
MW-16-091813	09/18/13 09:43	580-40429-12	NWTPH-Dx
MW-3-091813	09/18/13 14:49	580-40429-45	NWTPH-Dx
MW-38R-091713	09/17/13 13:24	580-40429-26	NWTPH-Dx
MW-4-091813	09/18/13 10:57	580-40429-34	NWTPH-Dx
S1-AD-091713	09/17/13 15:28	580-40429-9	NWTPH-Dx
S1-AU-091713	09/17/13 15:15	580-40429-8	NWTPH-Dx
S1-BD-091713	09/17/13 15:00	580-40429-5	NWTPH-Dx
S1-BU-091713	09/17/13 14:45	580-40429-2	NWTPH-Dx
S2-AD-091713	09/17/13 15:10	580-40429-6	NWTPH-Dx
S2-AU-091713	09/17/13 15:10	580-40429-7	NWTPH-Dx
S2-BD-091713	09/17/13 14:41	580-40429-1	NWTPH-Dx
S2-BU-091713	09/17/13 14:57	580-40429-4	NWTPH-Dx
S3-AD-091713	09/17/13 13:50	580-40429-28	NWTPH-Dx
S3-AU-091713	09/17/13 13:57	580-40429-29	NWTPH-Dx
S3-BD-091713	09/17/13 12:50	580-40429-23	NWTPH-Dx
S3-BU-091713	09/17/13 13:00	580-40429-25	NWTPH-Dx
S3-CD-091713	09/17/13 11:17	580-40429-19	NWTPH-Dx
S3-CU-091713	09/17/13 11:30	580-40429-20	NWTPH-Dx
S40-AD-091713	09/17/13 12:34	580-40429-24	NWTPH-Dx
S4-AD-091713	09/17/13 09:55	580-40429-58	NWTPH-Dx
S4-AU-091713	09/17/13 10:17	580-40429-17	NWTPH-Dx
S4-BD-091713	09/17/13 09:18	580-40429-55	NWTPH-Dx
S4-BU-091713	09/17/13 09:34	580-40429-57	NWTPH-Dx
S4-CD-091713	09/17/13 08:41	580-40429-52	NWTPH-Dx
S4-CU-091713	09/17/13 08:47	580-40429-53	NWTPH-Dx

Samples were analyzed by Test America, Tacoma, Washington.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Sayler.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative. Data qualifiers are listed in section 4.0 below.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: Monthly sampling currently includes samples from three water sample locations. Quarterly sampling includes 22 additional water sample locations, and semi-annual sampling includes 32 additional water samples. This round of sampling includes monthly, quarterly, and semi-annual locations.

No samples were required at locations 2A-W-9 and 5-W-51 due to the presence of free product. No sample was collected from locations 5-W-43. With the above exceptions, all intended samples were collected and the required analysis was completed by the laboratory for each collected sample.

Analysis methods: Samples were analyzed by method NWTPH-Dx and prepared by method SW3510C. These methods are approved EPA methods and therefore meet comparability requirements.

Precision, accuracy and completeness: Precision measurements were within laboratory control limits. Some results were estimated due to accuracy measurements, exceeded holding times, and blank contamination. Blank contamination also caused elevated reporting limits in some samples. Except for multiple analysis results that were replaced, no data were rejected.

A data completeness of 98% was calculated based on 60 of 61 intended sample analyses completed. This meets the project goal of 90%.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

Each batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCS_D), as well as appropriate surrogates. Laboratory duplicates may have been analyzed but not reported because non-project samples were utilized. Data qualifiers are not required due to a lack of reported laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. All samples were originally extracted and analyzed within holding time. Samples in two lab batches were re-extracted outside of holding time due to LCS recoveries, and these results are qualified as estimated.

Laboratory blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration.

Diesel #2 (C₁₀-C₂₄) and/or motor oil (>C₂₄-C₃₆) were detected in the method blanks as listed below:

Blank ID	Analyte	Concentration (mg/L)	RL (mg/L)
MB 580-141529/1-A	Motor Oil (>C24-C36)	0.0336 J	0.25
MB 580-141529/1-A	#2 Diesel (C10-C24)	0.0227 J	0.13
MB 580-145910/1-A	Motor Oil (>C24-C36)	0.149 J	0.25
MB 580-145910/1-A	#2 Diesel (C10-C24)	0.0697 J	0.13
MB 580-146158/1-A	#2 Diesel (C10-C24)	0.119 J	0.13
MB 580-146158/1-A	Motor Oil (>C24-C36)	0.211 J	0.25
MB 580-146257/1-A	#2 Diesel (C10-C24)	0.044 J	0.13
MB 580-146257/1-A	Motor Oil (>C24-C36)	0.0898 J	0.25
MB 580-146344/1-A	Motor Oil (>C24-C36)	0.215 J	0.25
MB 580-146344/1-A	#2 Diesel (C10-C24)	0.149	0.13
MB 580-146444/1-A	Motor Oil (>C24-C36)	0.300	0.25
MB 580-146444/1-A	#2 Diesel (C10-C24)	0.129 J	0.13
MB 580-146594/1-A	Motor Oil (>C24-C36)	0.104 J	0.25
MB 580-146594/1-A	#2 Diesel (C10-C24)	0.0961 J	0.13

Sample results less than five times the method blank level should be considered not detected at the reported concentration and are qualified "U". Samples results which are below both the PQL and the five times action level are qualified as both estimated and not detected "UJ". Sample results between five and ten times the method blank level are qualified as estimated "J".

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits with one exception:

Sample ID	Surrogate	% Recovery	Lab Control Limit
S2-BU-091713 RX	o-Terphenyl	45	50 - 150

Results in this sample are qualified as estimated.

LCS recoveries: Laboratory control limits ranged from 65-125% to 70-140%. LCS recoveries were within limits with two exceptions:

QC ID	Analyte	% Recovery	Lab Control Limit
LCS 580-145910/2-A	#2 Diesel (C10-C24)	68	70 - 140
LCS 580-146158/2-A	#2 Diesel (C10-C24)	59	70 - 140
LCSD 580-145910/3-A	#2 Diesel (C10-C24)	63	70 - 140
LCSD 580-146158/3-A	#2 Diesel (C10-C24)	55	70 - 140

Associated sample results are qualified as estimated.

LCS/LCSD RPDs: The laboratory control limit was <27%. LCS/LCSD RPD values were within limits.

Field duplicate RPDs: For concentrations below five times the reporting limits, concentrations were within +/- two times the reporting limit. For concentrations above five times the reporting limit, RPDs were below 50%.

Multiple analysis results: Two batches of September samples were re-extracted and re-analyzed due to LCS recoveries. Due to poor agreement between values in the first analysis and the re-extraction analysis, the client requested reanalysis of the original extracts for samples 2A-W-41-091713, S1-BD-091713, and S2-BU-091713. The reanalysis of the original extract agreed well with the re-extract and very poorly with the first analysis, suggesting a sample mix-up with the first analysis. The results from the first analysis of these samples are qualified "R", rejected as unusable. Upon finding the concentration discrepancies in the requested reanalyses, the laboratory re-analyzed all of the original extracts and found no further discrepancies.

The remaining multiple analysis results are evaluated according to the following guidelines:

- (1) If both results are non-detects, the lower reporting limit was selected.
- (2) If one result was not detected and the other detected, the detection was selected.
- (3) If both results were detections, the following additional criteria were applied:
 - (a) If one result was off-scale and one was on-scale, the on-scale result was selected.
 - (b) If associated QC results indicated high bias, the lower concentration result was selected.
 - (c) If associated QC results indicated no, low, or mixed biases, the higher concentration result was selected.

This approach is conservative, and is considered most protective of the environment. The results not selected as the best result to report are qualified R1, rejected due to the availability of better results.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. With two exceptions, these goals were met for samples with no hydrocarbons detected. Additionally, many samples results considered not detected due to blank contamination had reporting limits elevated above 0.1 mg/L:

Sample ID	Analyte	Elevated RL (mg/L)	Target RL (mg/L)
1A-W-4-091813	Motor Oil (>C24-C36)	0.13	0.1
1B-W-3-091813	Motor Oil (>C24-C36)	0.13	0.1
1C-W-1-091813	Motor Oil (>C24-C36)	0.12	0.1
1C-W-3-091813	Motor Oil (>C24-C36)	0.15	0.1
1C-W-7-091713	#2 Diesel (C10-C24)	0.12	0.1
1C-W-7-091713	Motor Oil (>C24-C36)	0.18	0.1
1C-W-8-091813	#2 Diesel (C10-C24)	0.11	0.1
1C-W-8-091813	Motor Oil (>C24-C36)	0.21	0.1
2A-W-10-091813 RX	#2 Diesel (C10-C24)	0.14	0.1
2A-W-10-091813 RX	Motor Oil (>C24-C36)	0.2	0.1
2A-W-40-091713	Motor Oil (>C24-C36)	0.11	0.1
2A-W-41-091713 RE	#2 Diesel (C10-C24)	0.11	0.1
2A-W-41-091713 RX	Motor Oil (>C24-C36)	0.13	0.1

Sample ID	Analyte	Elevated RL (mg/L)	Target RL (mg/L)
2A-W-42-091713	#2 Diesel (C10-C24)	0.2	0.1
2A-W-42-091713	Motor Oil (>C24-C36)	0.17	0.1
2A-W-8-091813	Motor Oil (>C24-C36)	0.12	0.1
2B-W-4-091813	Motor Oil (>C24-C36)	0.12	0.1
5-W-14-091713	Motor Oil (>C24-C36)	0.15	0.1
5-W-15-091713	#2 Diesel (C10-C24)	0.33	0.1
5-W-15-091713 RX	Motor Oil (>C24-C36)	0.31	0.1
5-W-17-091713	Motor Oil (>C24-C36)	0.15	0.1
5-W18-091713	#2 Diesel (C10-C24)	0.16	0.1
5-W18-091713	Motor Oil (>C24-C36)	0.21	0.1
5-W-54-091713	#2 Diesel (C10-C24)	0.12	0.1
5-W-55-091613	#2 Diesel (C10-C24)	0.16	0.1
5-W-55-091613	Motor Oil (>C24-C36)	0.25	0.1
EW-1-091813	Motor Oil (>C24-C36)	0.14	0.1
EW-2A-091813	Motor Oil (>C24-C36)	0.15	0.1
GW-1-091813 RX	Motor Oil (>C24-C36)	0.11	0.1
GW-2-091813	Motor Oil (>C24-C36)	0.16	0.1
GW-4-091713 RX	Motor Oil (>C24-C36)	0.16	0.1
MW-16-091813	Motor Oil (>C24-C36)	0.14	0.1
MW-38R-091713	Motor Oil (>C24-C36)	0.14	0.1
MW-4-091813 RX	#2 Diesel (C10-C24)	0.19	0.1
MW-4-091813 RX	Motor Oil (>C24-C36)	0.15	0.1
S1-AD-091713	#2 Diesel (C10-C24)	0.11	0.1
S1-AD-091713	Motor Oil (>C24-C36)	0.17	0.1
S1-AU-091713	#2 Diesel (C10-C24)	0.17	0.1
S1-AU-091713	Motor Oil (>C24-C36)	0.26	0.1
S2-AD-091713	Motor Oil (>C24-C36)	0.14	0.1
S2-BD-091713	Motor Oil (>C24-C36)	0.22	0.1
S2-BU-091713 RE	Motor Oil (>C24-C36)	0.31	0.1
S3-AD-091713	Motor Oil (>C24-C36)	0.11	0.1
S3-BD-091713	#2 Diesel (C10-C24)	0.12	0.1
S3-CU-091713	Motor Oil (>C24-C36)	0.12	0.1
S4-AD-091713	#2 Diesel (C10-C24)	0.11	0.1
S4-AD-091713	Motor Oil (>C24-C36)	0.18	0.1
S4-AU-091713	#2 Diesel (C10-C24)	0.17	0.1
S4-AU-091713	Motor Oil (>C24-C36)	0.2	0.1
S4-BD-091713 RX	Motor Oil (>C24-C36)	0.23	0.1
S4-BU-091713	Motor Oil (>C24-C36)	0.37	0.1
S4-BU-091713 RX	#2 Diesel (C10-C24)	0.15	0.1
S4-CD-091713 RX	#2 Diesel (C10-C24)	0.14	0.1
S4-CD-091713 RX	Motor Oil (>C24-C36)	0.24	0.1
S4-CU-091713 RX	#2 Diesel (C10-C24)	0.12	0.1
S4-CU-091713 RX	Motor Oil (>C24-C36)	0.27	0.1

No qualifiers are added based on exceeding reporting limit goals.

Laboratory narrative and flags: According to the laboratory narrative, 26 samples were received at the laboratory at a temperature of 10.7 °C, exceeding the recommended temperature of 2 to 6 °C. These samples are qualified as estimated. Samples include: 1B-W-23-091813, 1B-W-3-091813, 1C-W-1-091813, 1C-W-4-091813, 1C-W-8-091813, 2A-W-41-091713, 2A-W-420-091713, 2A-W-8-091813, 5-W-15-091713, 5-W-16-091613, 5-W-170-091713, 5-W18-091713, 5-W-56-091613, GW-1-091813, GW-3-091713, GW-4-091713, S1-AD-091713, S1-BU-091713, S2-AD-091713, S2-BU-091713, S3-AD-091713, S4-AD-091713, S4-BD-091713, S4-BU-091713, S4-CD-091713, and S4-CU-091713. No other qualifiers were added based on a review of the laboratory narratives.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as qualified.

4.0 Validation Qualifiers

Sample ID	Analytes	Qualifier	Reason
1A-W-4-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
1B-W-2-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
1B-W-2-091813 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time
1B-W-230-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
1B-W-23-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
1B-W-23-091813 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
1B-W-3-073113	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
1B-W-3-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp
1C-W-1-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp
1C-W-3-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
1C-W-4-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
1C-W-4-091813 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
1C-W-70-073113	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
1C-W-70-091713	#2 Diesel (C10-C24)	U	Blank Contamination
1C-W-70-091713	Motor Oil (>C24-C36)	UJ	Blank Contamination
1C-W-7-073113	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
1C-W-7-091713	Motor Oil (>C24-C36)	UJ	Blank Contamination
1C-W-7-091713	#2 Diesel (C10-C24)	UJ	Blank Contamination, Low LCS/D recoveries
1C-W-7-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
1C-W-8-073113	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
1C-W-8-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp
2A-W-10-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
2A-W-10-091813 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time
2A-W-40-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
2A-W-41-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R	Possible Sample Mix-up
2A-W-41-091713 RE	Motor Oil (>C24-C36)	R1	Another result available
2A-W-41-091713 RE	#2 Diesel (C10-C24)	UJ	Blank contamination, Low LCS/D recoveries, High sample receipt temp
2A-W-41-091713 RX	Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
2A-W-41-091713 RX	#2 Diesel (C10-C24)	R1	Another result available
2A-W-420-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp

Sample ID	Analytes	Qualifier	Reason
2A-W-42-091713	#2 Diesel (C10-C24)	U	Blank Contamination
2A-W-42-091713	Motor Oil (>C24-C36)	UJ	Blank Contamination
2A-W-8-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp
2B-W-4-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
5-W-14-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
5-W-15-091713	Motor Oil (>C24-C36)	R1	Another result available
5-W-15-091713	#2 Diesel (C10-C24)	UJ	Blank Contamination Low LCS/D recoveries, High sample receipt temp
5-W-15-091713 RX	#2 Diesel (C10-C24)	R1	Another result available
5-W-15-091713 RX	Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
5-W-16-091613	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
5-W-16-091613 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
5-W-170-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp
5-W-17-091713	#2 Diesel (C10-C24)	UJ	Blank Contamination Low LCS/D recoveries
5-W-17-091713	Motor Oil (>C24-C36)	UJ	Blank Contamination
5-W-17-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
5-W18-091713	Motor Oil (>C24-C36)	UJ	Blank Contamination, High sample receipt temp
5-W18-091713	#2 Diesel (C10-C24)	UJ	Blank Contamination Low LCS/D recoveries, High sample receipt temp
5-W18-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
5-W-19-091613	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
5-W-19-091613 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time
5-W-50-091613	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
5-W-50-091613 RX	Motor Oil (>C24-C36)	J	Blank Contamination, Exceeded hold time
5-W-50-091613 RX	#2 Diesel (C10-C24)	J	Exceeded hold time
5-W-54-091713	Motor Oil (>C24-C36)	UJ	Blank Contamination
5-W-55-091613	Motor Oil (>C24-C36)	U	Blank Contamination
5-W-55-091613	#2 Diesel (C10-C24)	UJ	Blank Contamination Low LCS/D recoveries
5-W-55-091613 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
5-W-56-091613	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
5-W-56-091613 RX	#2 Diesel (C10-C24)	J	Exceeded hold time, High sample receipt temp
5-W-56-091613 RX	Motor Oil (>C24-C36)	J	Blank Contamination, Exceeded hold time, High sample receipt temp
EW-1-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
EW-2A-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
GW-1-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available

Sample ID	Analytes	Qualifier	Reason
GW-1-091813 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
GW-2-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
GW-3-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp
GW-4-091713	Motor Oil (>C24-C36)	R1	Another result available
GW-4-091713	#2 Diesel (C10-C24)	UJ	Blank Contamination Low LCS/D recoveries, High sample receipt temp
GW-4-091713 RX	#2 Diesel (C10-C24)	R1	Another result available
GW-4-091713 RX	Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
MW-16-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
MW-3-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
MW-3-091813 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time
MW-38R-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
MW-4-091813	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
MW-4-091813 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time
S1-AD-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp
S1-AU-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	U	Blank Contamination
S1-BD-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R	Possible Sample Mix-up
S1-BD-091713 RE	Motor Oil (>C24-C36)	UJ	Blank Contamination
S1-BD-091713 RE	#2 Diesel (C10-C24)	UJ	Blank Contamination Low LCS/D recoveries
S1-BD-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
S1-BU-091713	Motor Oil (>C24-C36)	R1	Another result available
S1-BU-091713	#2 Diesel (C10-C24)	UJ	Blank Contamination Low LCS/D recoveries, High sample receipt temp
S1-BU-091713 RX	#2 Diesel (C10-C24)	R1	Another result available
S1-BU-091713 RX	Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
S2-AD-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp
S2-AU-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
S2-BD-091713	#2 Diesel (C10-C24)	UJ	Blank Contamination Low LCS/D recoveries
S2-BD-091713	Motor Oil (>C24-C36)	UJ	Blank Contamination
S2-BD-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
S2-BU-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R	Possible Sample Mix-up
S2-BU-091713 RE	#2 Diesel (C10-C24)	J	Blank Contamination, Low LCS/D recoveries, Low surrogate recovery, High sample receipt temp
S2-BU-091713 RE	Motor Oil (>C24-C36)	UJ	Blank Contamination, Low surrogate recovery, High sample receipt temp
S2-BU-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available

Sample ID	Analytes	Qualifier	Reason
S3-AD-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp
S3-AU-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
S3-BD-091713	Motor Oil (>C24-C36)	UJ	Blank Contamination
S3-BU-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
S3-CD-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
S3-CD-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time
S3-CU-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
S40-AD-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination
S4-AD-091713	#2 Diesel (C10-C24)	UJ	Blank Contamination Low LCS/D recoveries, High sample receipt temp
S4-AD-091713	Motor Oil (>C24-C36)	UJ	Blank contamination, High sample receipt temp
S4-AD-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
S4-AU-091713	#2 Diesel (C10-C24)	U	Blank Contamination
S4-AU-091713	Motor Oil (>C24-C36)	UJ	Blank Contamination
S4-BD-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
S4-BD-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
S4-BU-091713	#2 Diesel (C10-C24)	R1	Another result available
S4-BU-091713	Motor Oil (>C24-C36)	UJ	Blank Contamination, High sample receipt temp
S4-BU-091713 RX	Motor Oil (>C24-C36)	R1	Another result available
S4-BU-091713 RX	#2 Diesel (C10-C24)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
S4-CD-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
S4-CD-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp
S4-CU-091713	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
S4-CU-091713 RX	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Blank Contamination, Exceeded hold time, High sample receipt temp

5.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

<u>DV Qualifier</u>	<u>Definition</u>
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCS D	Laboratory control sample duplicate
MS	Matrix spike
MS D	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

6.0 References

USEPA Contract Laboratory Program National Functional Guidelines For Superfund Organic Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency, June 2008, USEPA-540-R-008-01.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.

Sayer Data Solutions, Inc.

DATA VALIDATION REPORT



Skykomish Groundwater Monitoring October –December 2013 Data

Prepared for:
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, Washington 98027

February 21, 2014

1.0 Introduction

The following water samples were validated:

Sample ID	Sample Date/ Time	Lab ID	Analysis
1B-W-3-102313	10/23/13 12:20	580-41010-1	NWTPH-Dx
1C-W-8-102313	10/23/13 13:13	580-41010-2	NWTPH-Dx
1C-W-7-102313	10/23/13 14:00	580-41010-3	NWTPH-Dx
1C-W-70-102313	10/23/13 16:00	580-41010-4	NWTPH-Dx
1B-W-3-111913	11/19/13 13:49	580-41365-1	NWTPH-Dx
1C-W-7-111913	11/19/13 14:41	580-41365-2	NWTPH-Dx
1C-W-70-111913	11/19/13 14:51	580-41365-3	NWTPH-Dx
1C-W-8-111913	11/19/13 15:44	580-41365-4	NWTPH-Dx
2B-W-4-121213	12/12/13 14:05	580-41683-1	NWTPH-Dx
GW-4-121313	12/13/13 08:42	580-41683-2	NWTPH-Dx
EW-2A-121313	12/13/13 09:20	580-41683-3	NWTPH-Dx
1C-W-7-121313	12/13/13 09:33	580-41683-4	NWTPH-Dx
1C-W-8-121313	12/13/13 10:50	580-41683-5	NWTPH-Dx
1C-W-80-121313	12/13/13 11:00	580-41683-6	NWTPH-Dx
MW-4-121313	12/13/13 11:01	580-41683-7	NWTPH-Dx
5-W-19-121313	12/13/13 11:23	580-41683-8	NWTPH-Dx
5-W-190-121313	12/13/13 13:19	580-41683-9	NWTPH-Dx
1C-W-4-121313	12/13/13 11:25	580-41683-10	NWTPH-Dx
2A-W-10-121313	12/13/13 11:55	580-41683-11	NWTPH-Dx
2A-W-100-121313	12/13/13 16:00	580-41683-12	NWTPH-Dx
1C-W-1-121313	12/13/13 12:19	580-41683-13	NWTPH-Dx
5-W-16-121313	12/13/13 12:22	580-41683-14	NWTPH-Dx
EW-1-121313	12/13/13 13:11	580-41683-15	NWTPH-Dx
GW-1-121313	12/13/13 13:33	580-41683-16	NWTPH-Dx
2A-W-40-121313	12/13/13 14:05	580-41683-17	NWTPH-Dx
MW-3-121313	12/13/13 14:25	580-41683-18	NWTPH-Dx
GW-2-121313	12/13/13 14:33	580-41683-19	NWTPH-Dx

Sample ID	Sample Date/ Time	Lab ID	Analysis
1B-W-3-121313	12/13/13 14:37	580-41683-20	NWTPH-Dx
1B-W-23-121313	12/13/13 15:33	580-41683-21	NWTPH-Dx
1B-W-2-121313	12/13/13 15:37	580-41683-22	NWTPH-Dx
2A-W-41-121313	12/13/13 16:20	580-41683-23	NWTPH-Dx
2A-W-42-121313	12/13/13 16:25	580-41683-24	NWTPH-Dx
GW-3-121313	12/13/13 16:42	580-41683-25	NWTPH-Dx
5-W-14-121413	12/14/13 08:00	580-41683-26	NWTPH-Dx
5-W-17-121413	12/14/13 08:37	580-41683-27	NWTPH-Dx
5-W-18-121413	12/14/13 09:42	580-41683-28	NWTPH-Dx
5-W-15-121413	12/14/13 10:31	580-41683-29	NWTPH-Dx

Samples were analyzed by Test America, Tacoma, Washington.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Saylor.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative. Data qualifiers are listed in section 4.0 below.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: Monthly sampling currently includes samples from three water sample locations. Quarterly sampling includes 22 additional water sample locations, and semi-annual sampling includes 32 additional water samples. This round of sampling includes monthly and quarterly locations.

With one exception, all intended samples were collected and the required analysis was completed by the laboratory for each collected sample. No sample was collected from location 5-W-43 and 2A-W-9. With the above exceptions, all intended samples were collected and the required analysis was completed by the laboratory for each collected sample.

Analysis methods: Samples were analyzed by method NWTPH-Dx and prepared by method SW3510C. These methods are approved EPA methods and therefore meet comparability requirements.

Precision, accuracy and completeness: Precision measurements were within laboratory control limits. Some results were estimated due to accuracy measurements, exceeded holding times, and blank contamination. Blank contamination also caused elevated reporting limits in some samples. Except for multiple analysis results that were replaced, no data were rejected.

A data completeness of 93% was calculated based on 29 of 31 intended sample analyses completed. This meets the project goal of 90%.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

Each batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCSD), as well as appropriate surrogates. Laboratory duplicates may have been analyzed but not reported because non-project samples were utilized. Data qualifiers are not required due to a lack of reported laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. Samples were extracted and analyzed within holding time.

Laboratory blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration.

Motor oil (>C₂₄-C₃₆) was detected in the method blanks as listed below:

Blank ID	Analyte	Concentration (mg/L)	RL (mg/L)
MB 580-149998/1-A	Motor Oil (>C ₂₄ -C ₃₆)	0.0168 J	0.25

Sample results less than five times the method blank level should be considered not detected at the reported concentration and are qualified "U". Samples results which are below both the PQL and the five times action level are qualified as both estimated and not detected "UJ". Sample results between five and ten times the method blank level are qualified as estimated "J".

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits with one exception:

Sample ID	Surrogate	% Recovery	Lab Control Limit
1B-W-2-121313	o-Terphenyl	32	50 - 150

Results in this sample are qualified as estimated.

LCS recoveries: Laboratory control limits ranged from 65-125% to 70-140%. LCS recoveries were within limits.

LCS/LCSD RPDs: The laboratory control limit was <27%. LCS/LCSD RPD values were within limits.

Field duplicate RPDs: For concentrations below five times the reporting limits, concentrations were within +/- two times the reporting limit. For concentrations above five times the reporting limit, RPDs were below 50% with the following exception:

FD ID/Sample ID	Analyte	FD Result (mg/L)	Sample Result (mg/L)	RPD
1C-W-80-121313 / 1C-W-8-121313	#2 Diesel (C10-C24)	0.094	0.16 Y	52.0

This analyte is qualified as estimated in both the sample and duplicate.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met.

Laboratory narrative and flags: No other qualifiers were added based on a review of the laboratory narratives.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as qualified.

4.0 Validation Qualifiers

Sample ID	Analytes	Qualifier	Reason
1B-W-2-121313	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	J	Low surrogate recovery
1B-W-3-111913	Motor Oil (>C24-C36)	U	Blank Contamination
1C-W-7-111913	Motor Oil (>C24-C36)	J	Blank Contamination
1C-W-8-121313	#2 Diesel (C10-C24)	J	High FD RPD
1C-W-80-121313	#2 Diesel (C10-C24)	J	High FD RPD

5.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike

<u>Abbreviation</u>	<u>Definition</u>
MSD	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

6.0 References

USEPA Contract Laboratory Program National Functional Guidelines For Superfund Organic Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency, June 2008, USEPA-540-R-008-01.

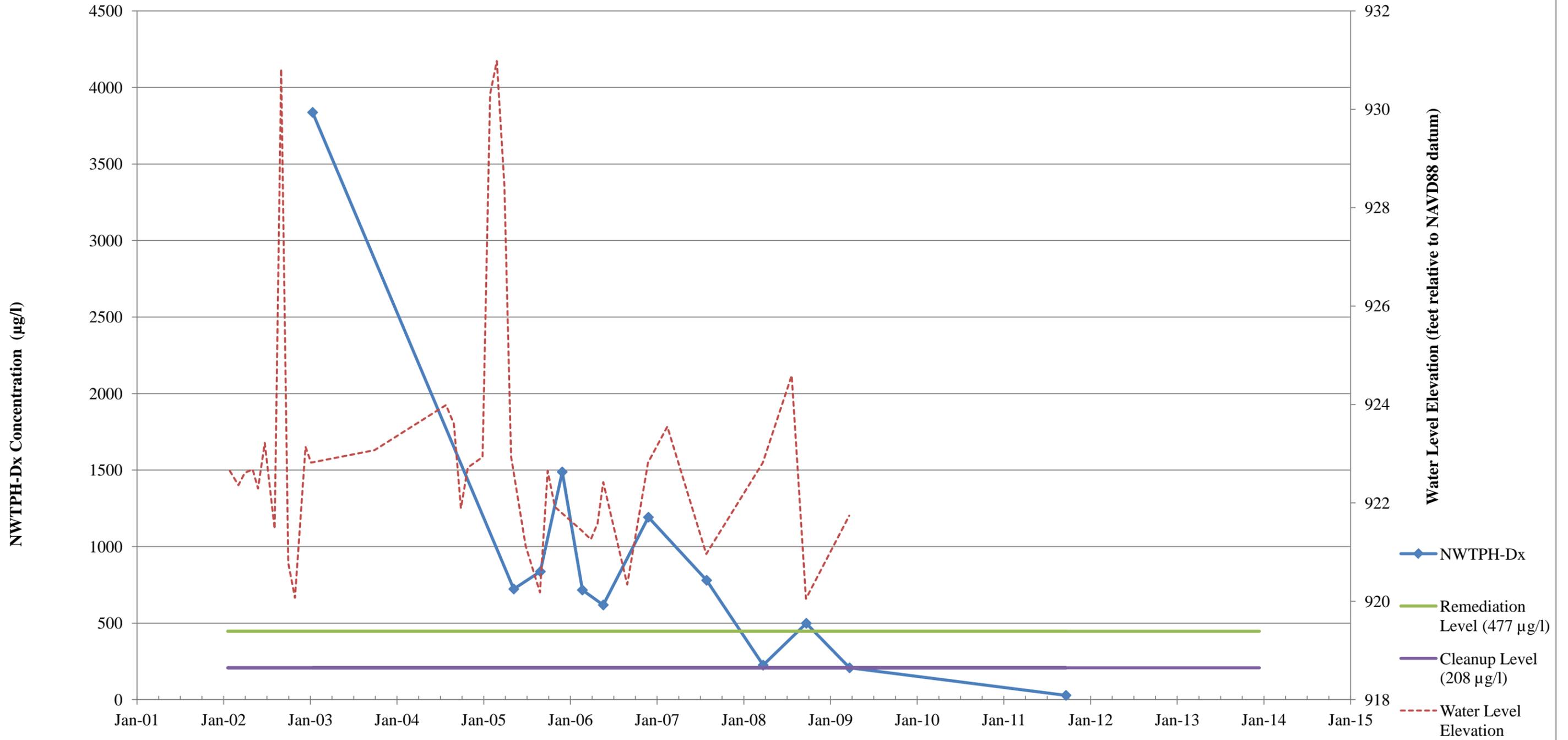
USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.

APPENDIX C
NWTPH-DX MONITORING WELL TREND PLOTS

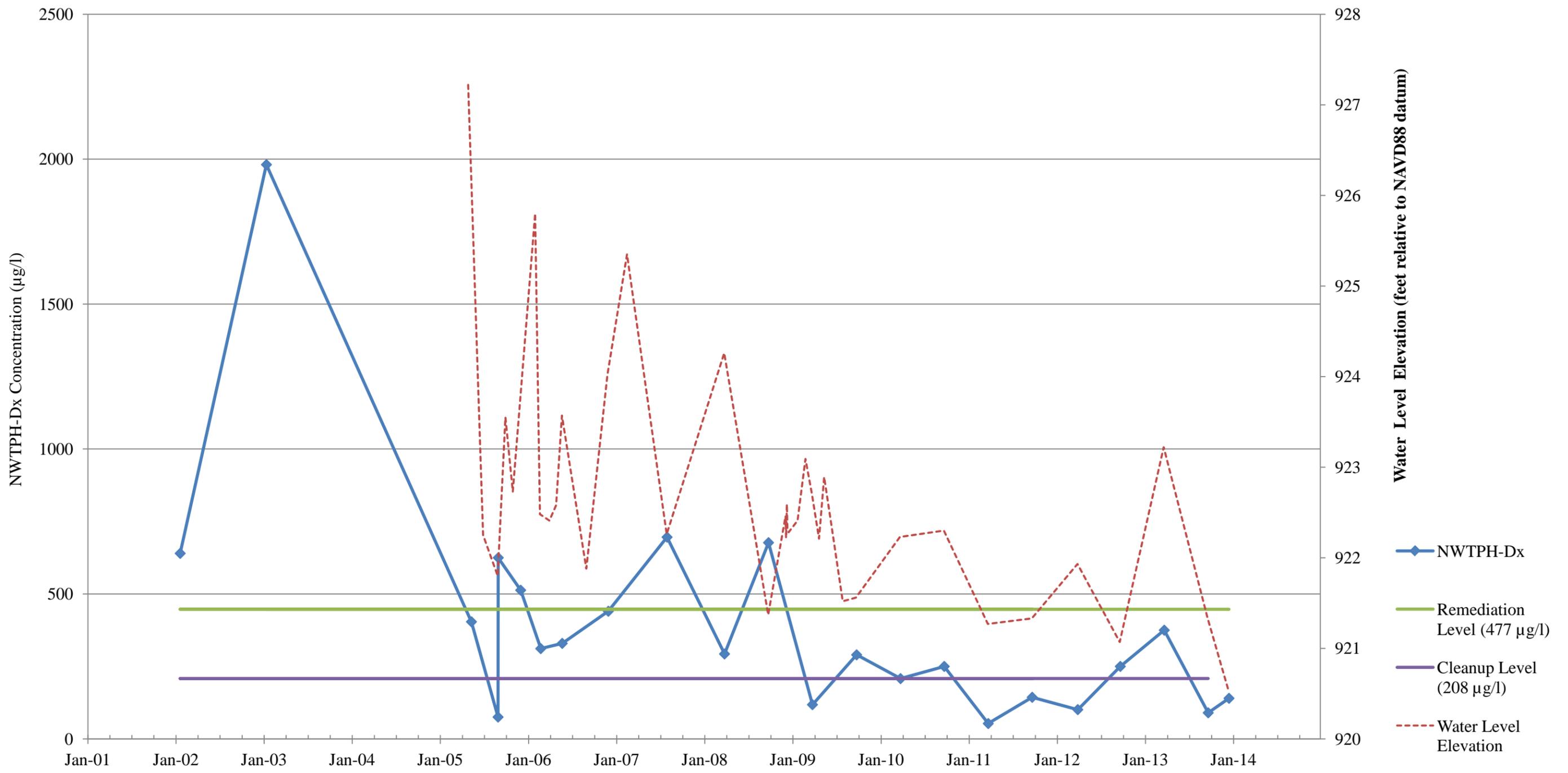
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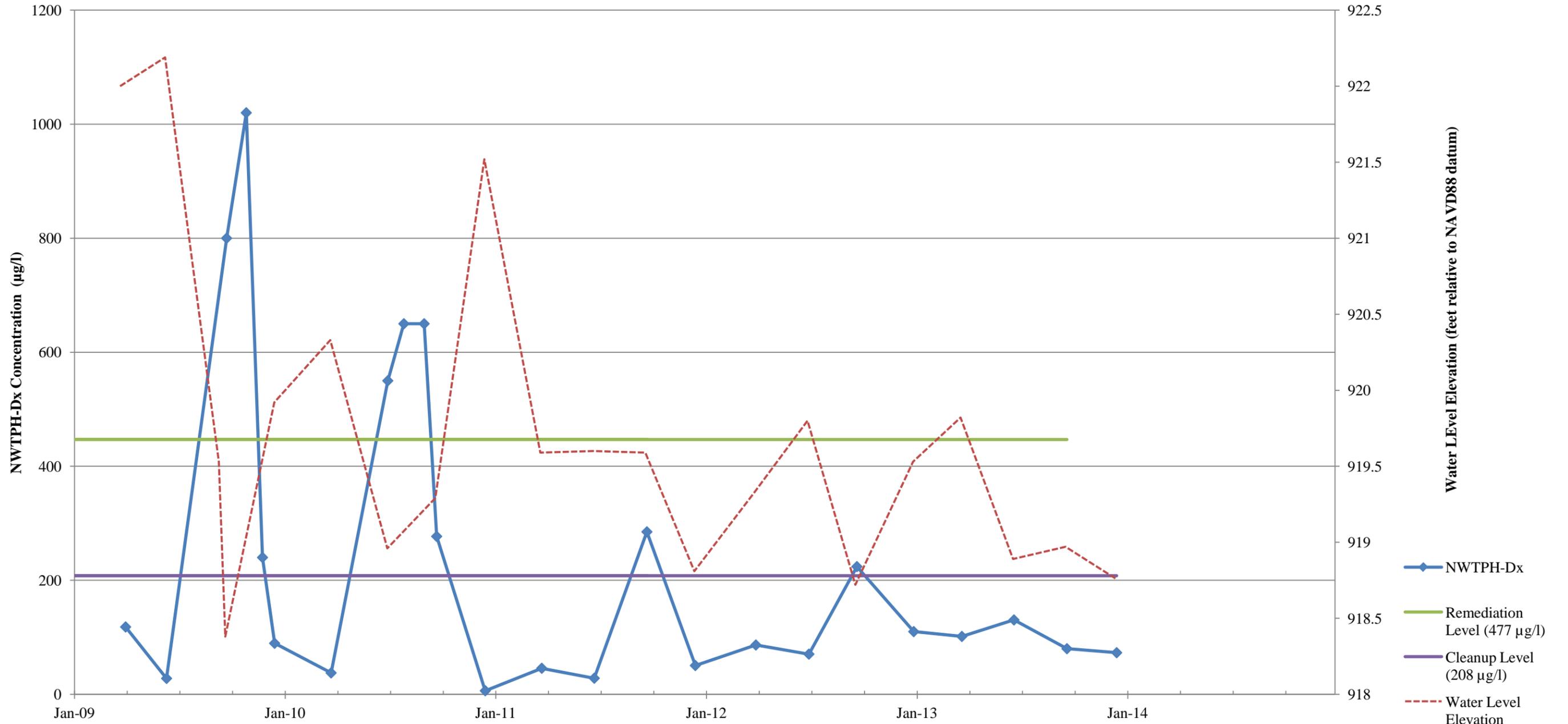
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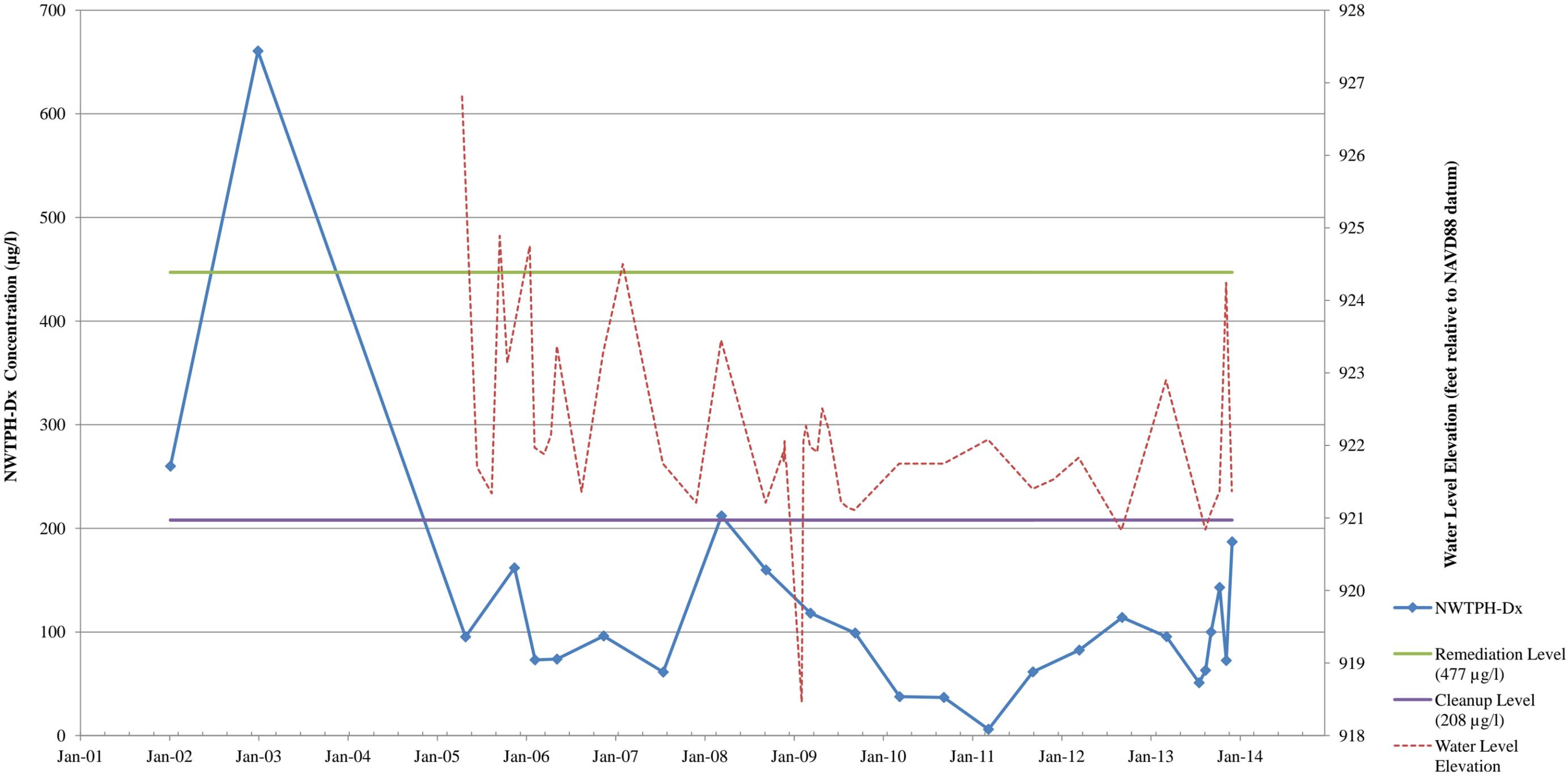
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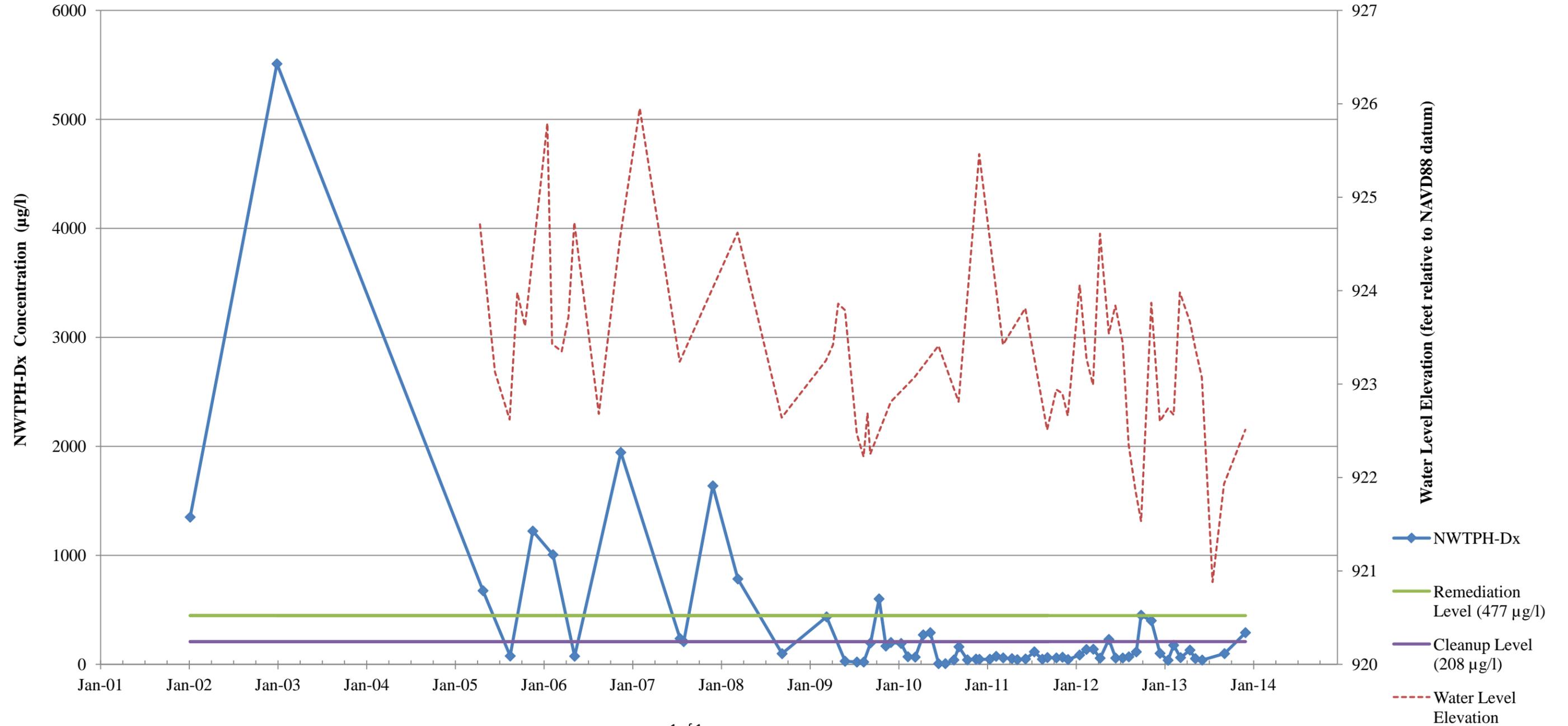
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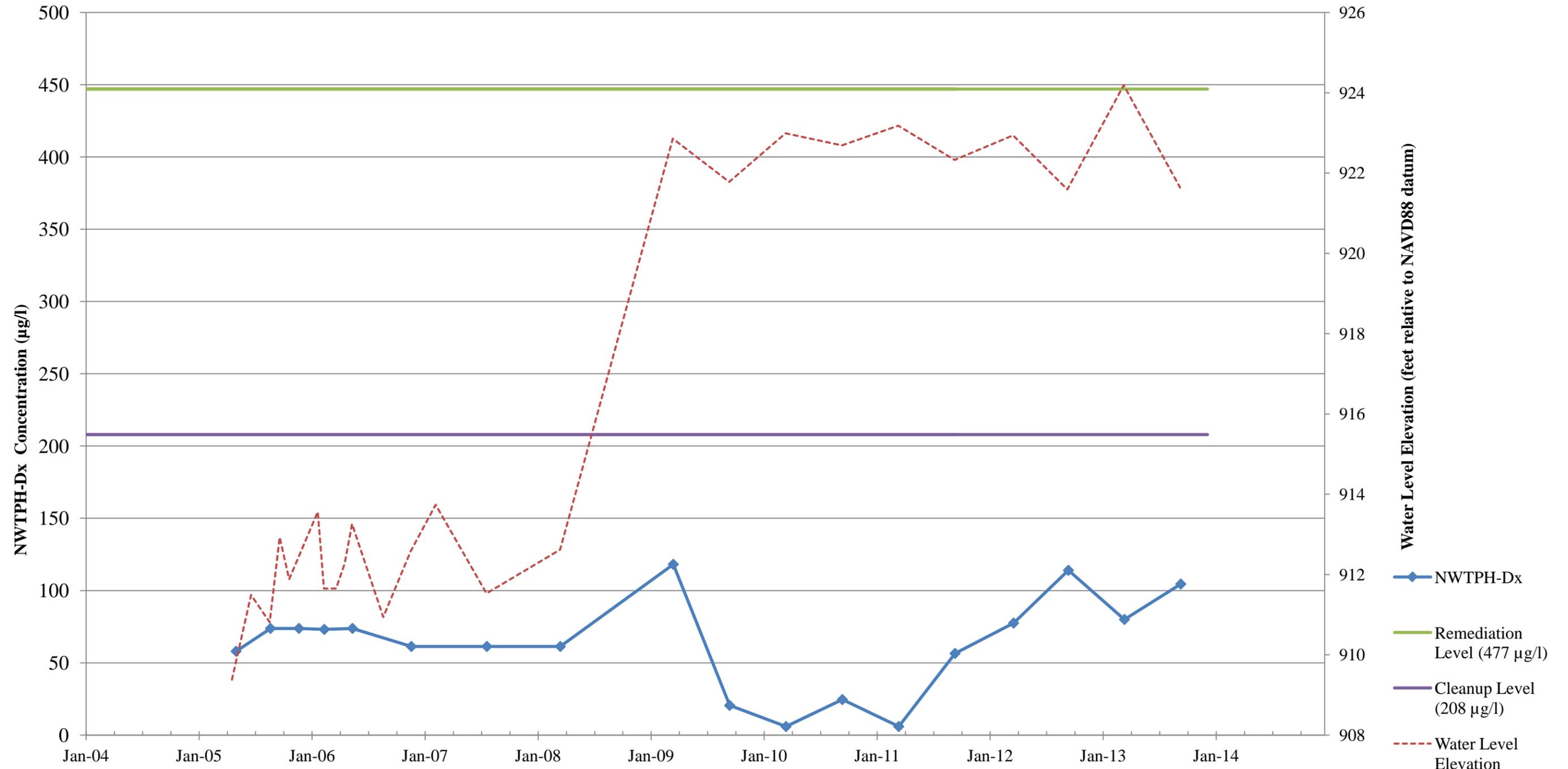
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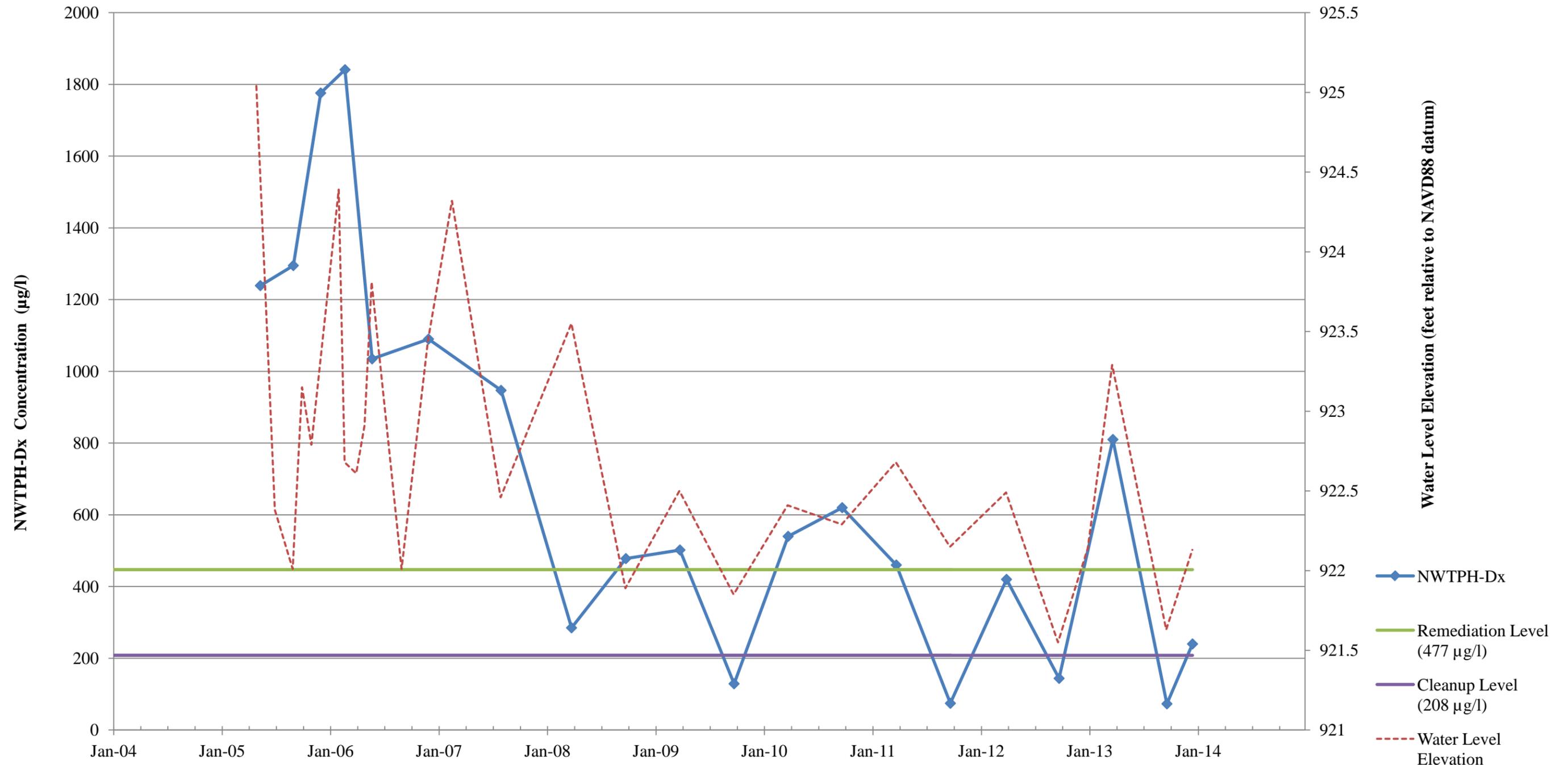
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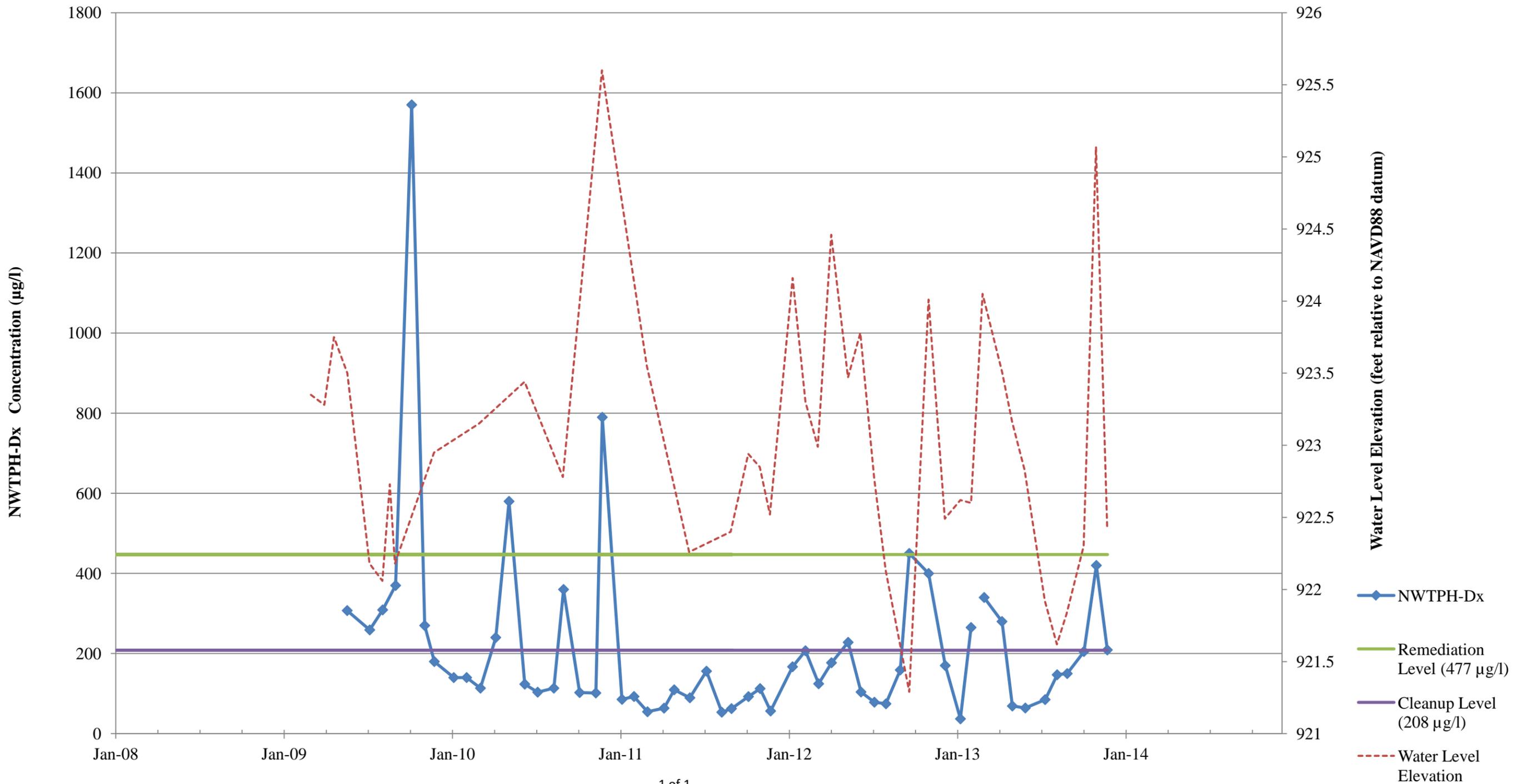
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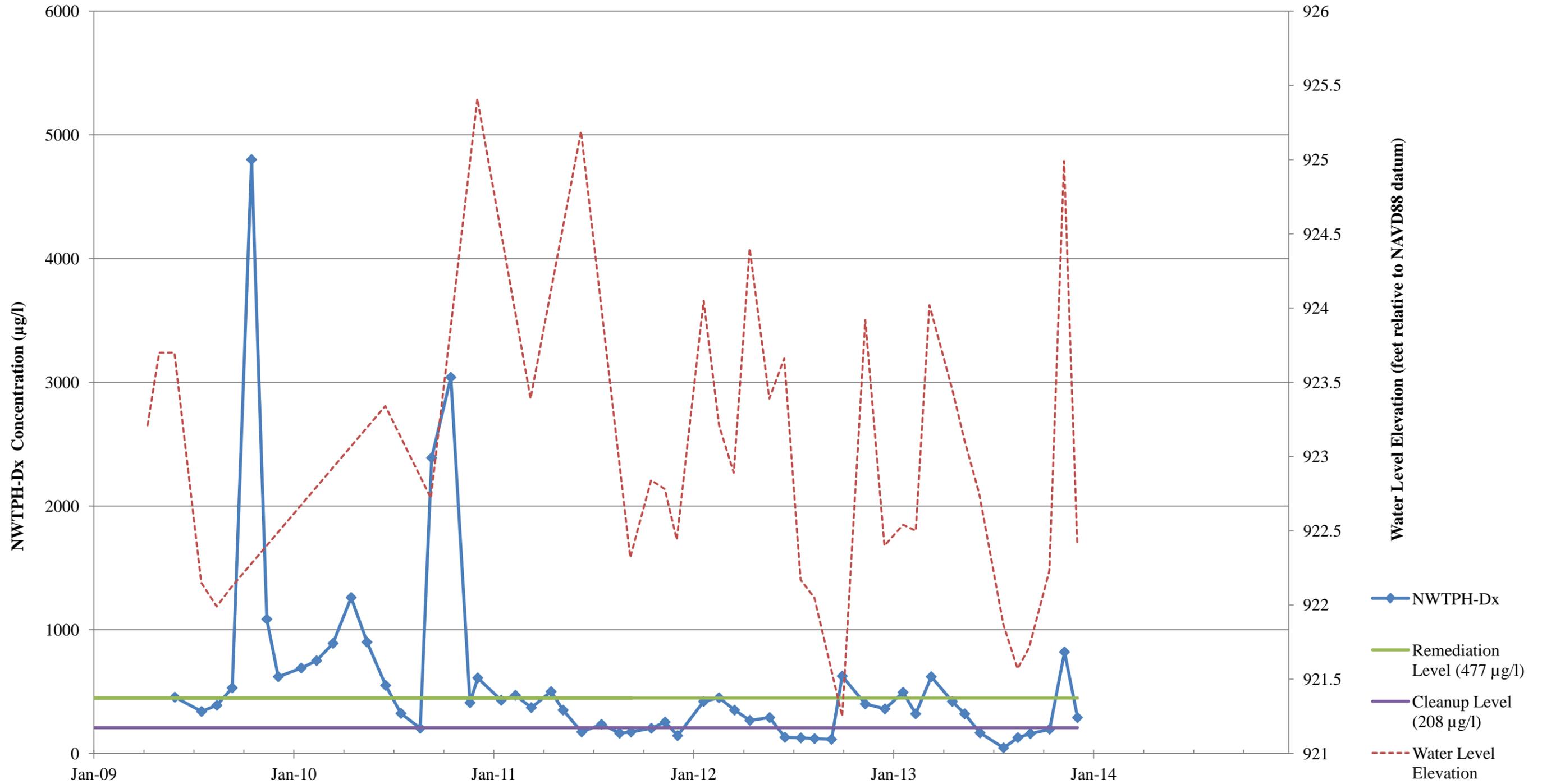
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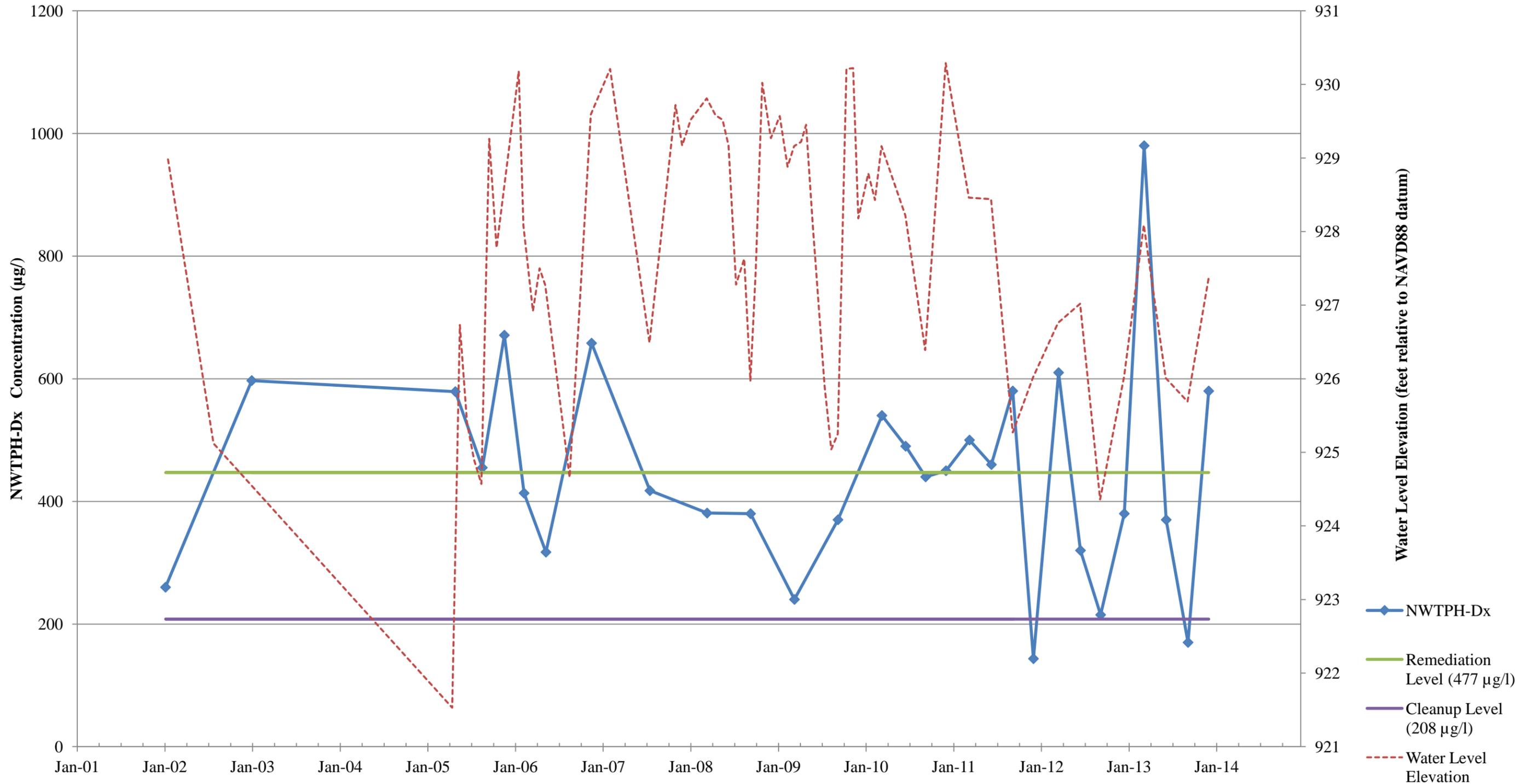
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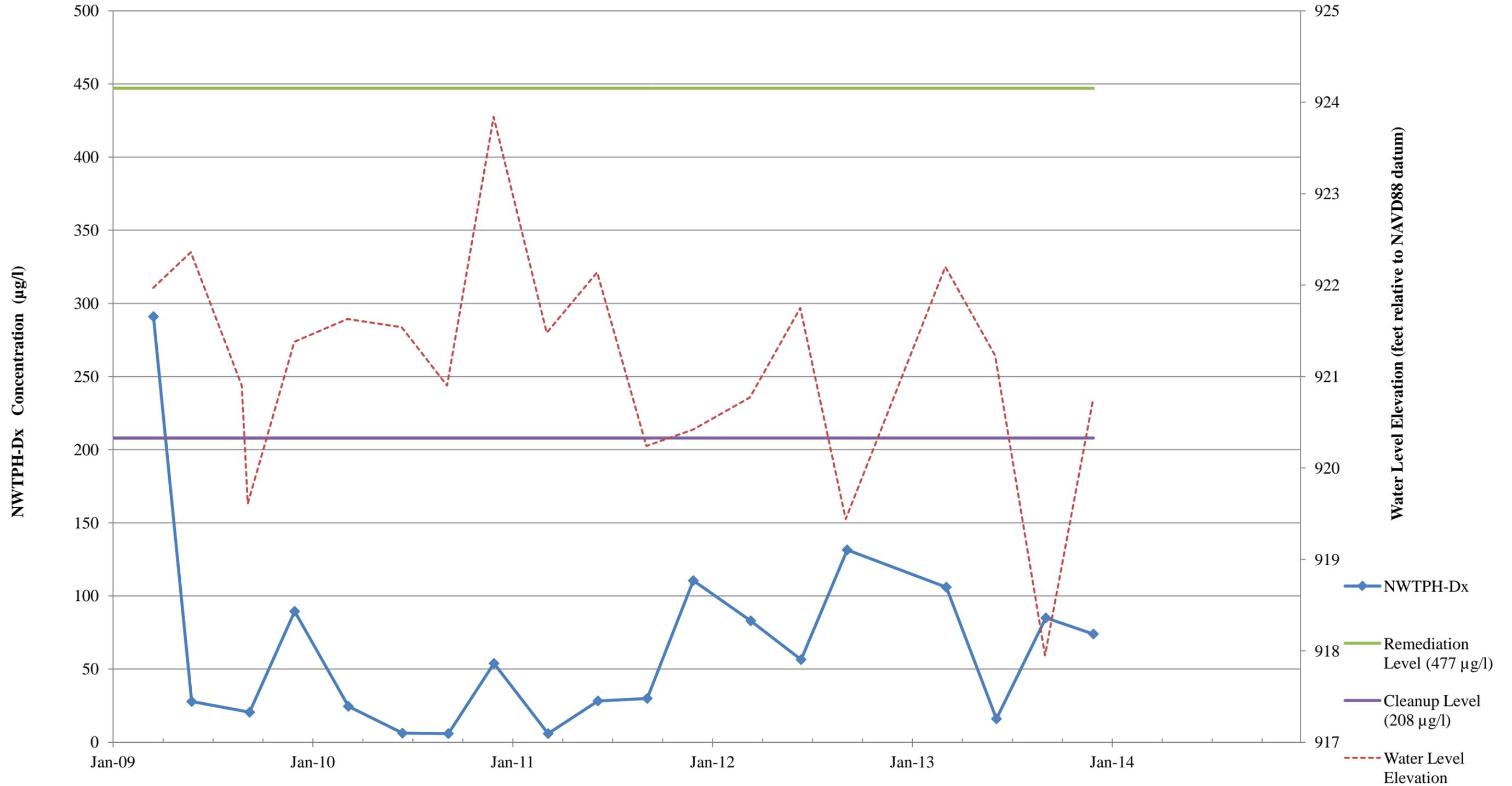
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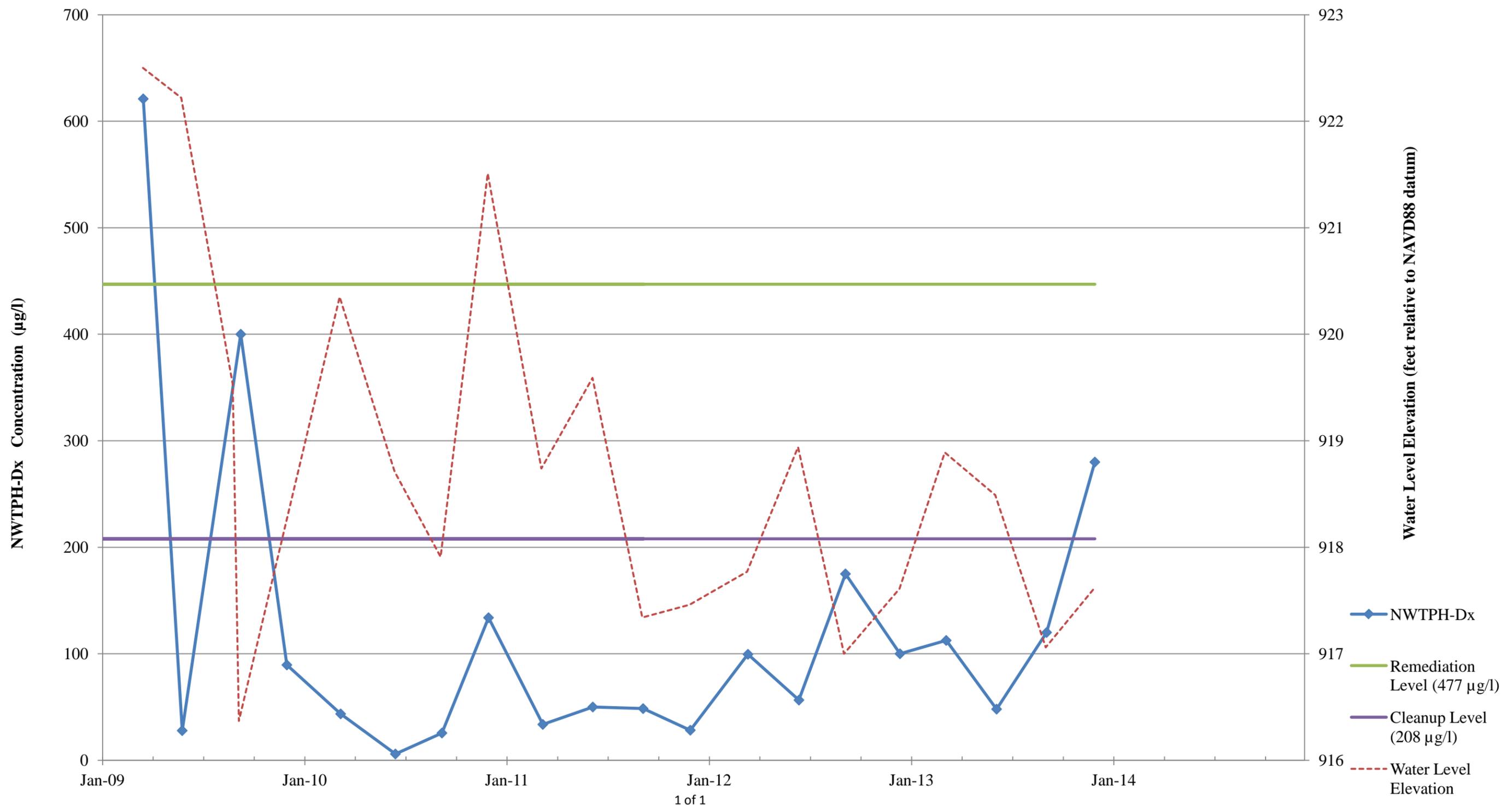
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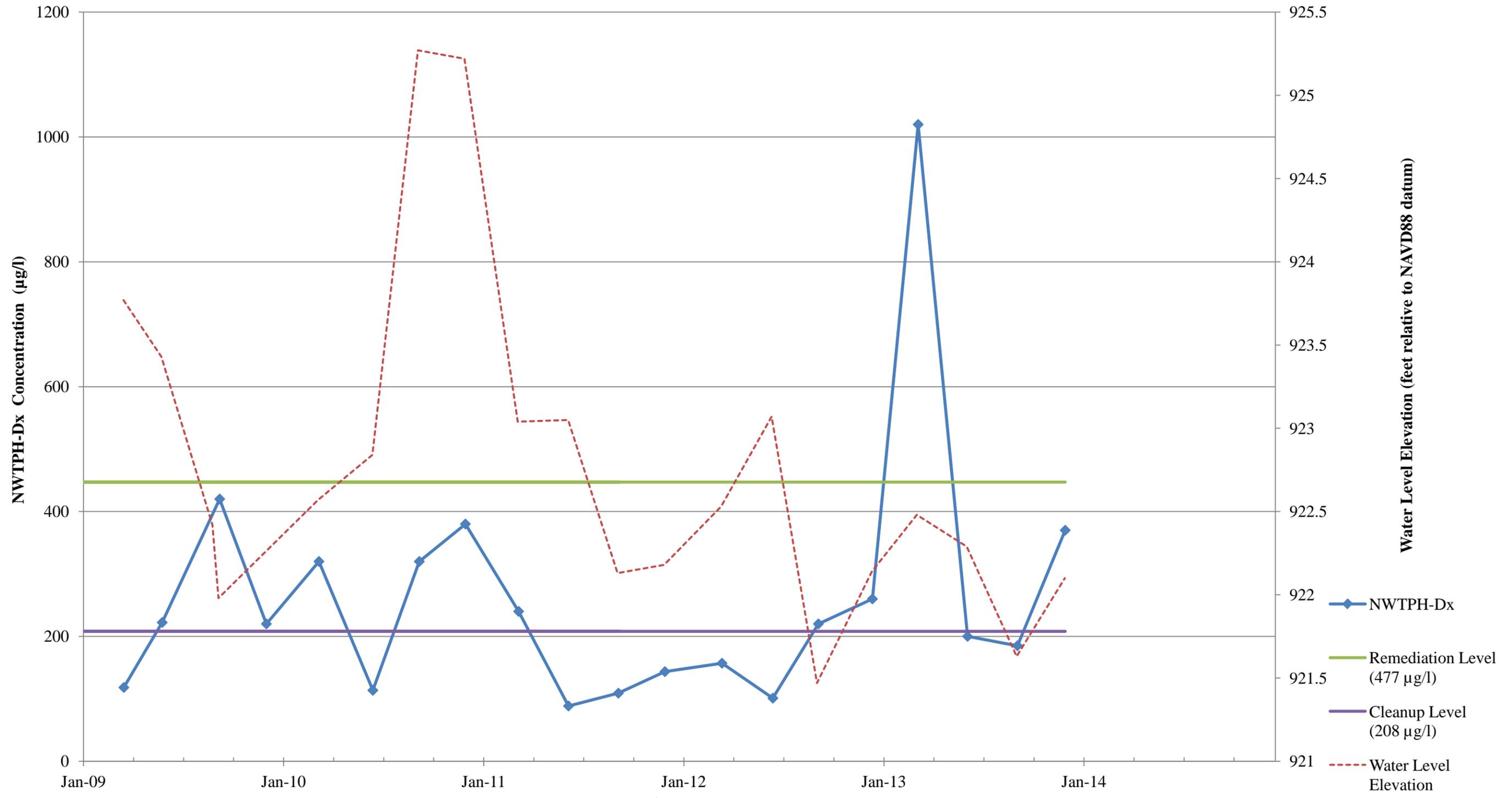
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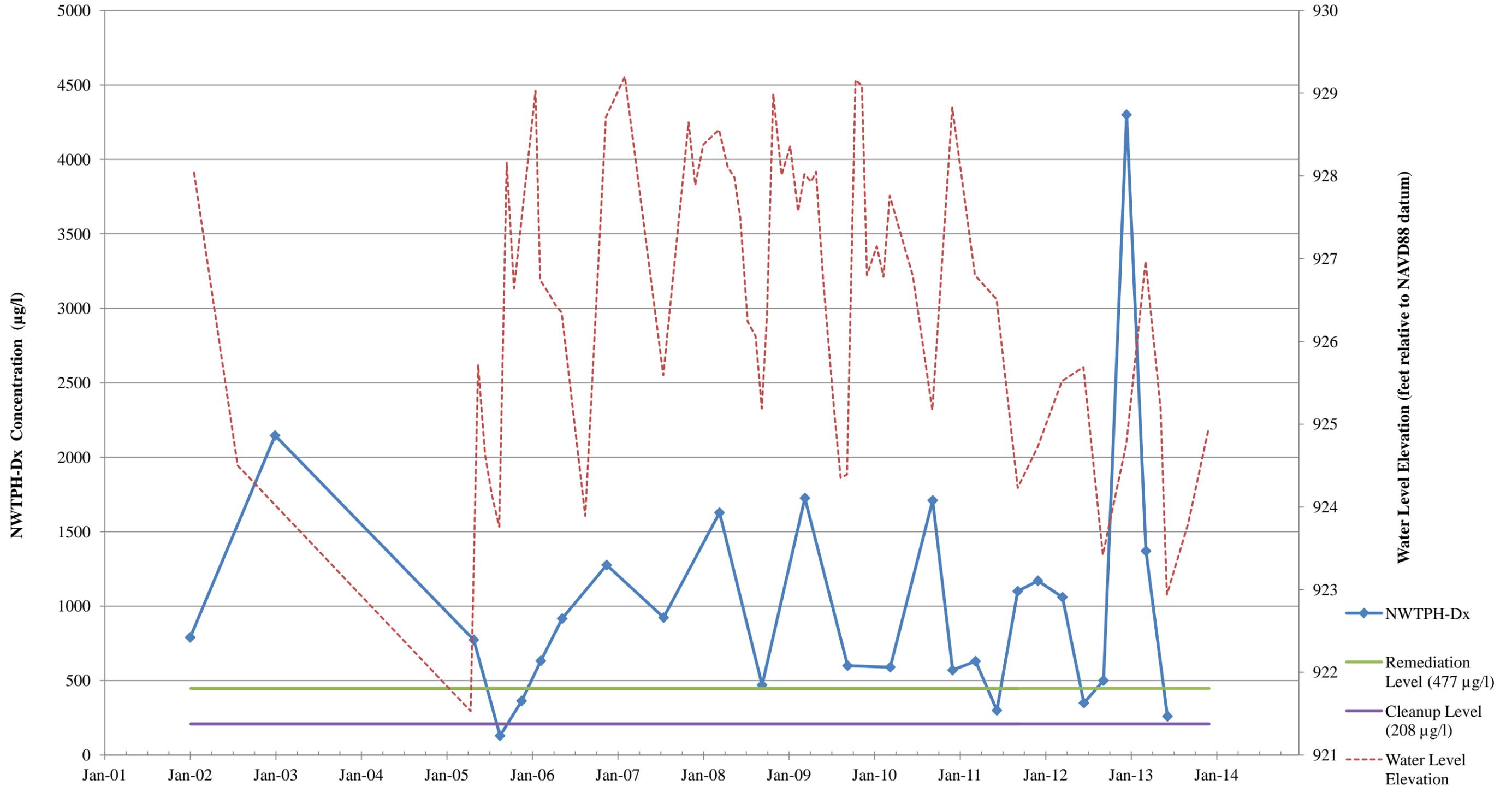
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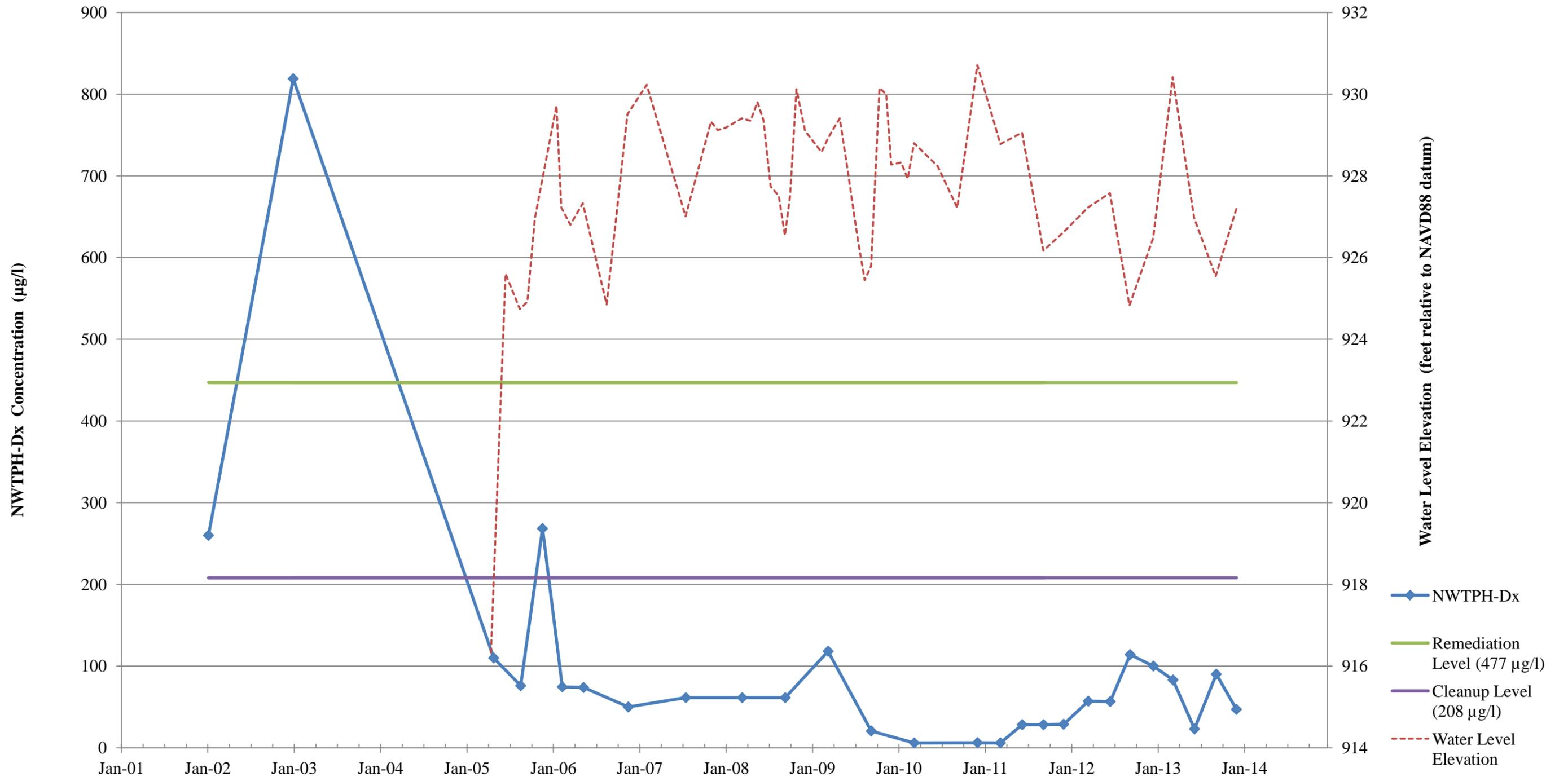
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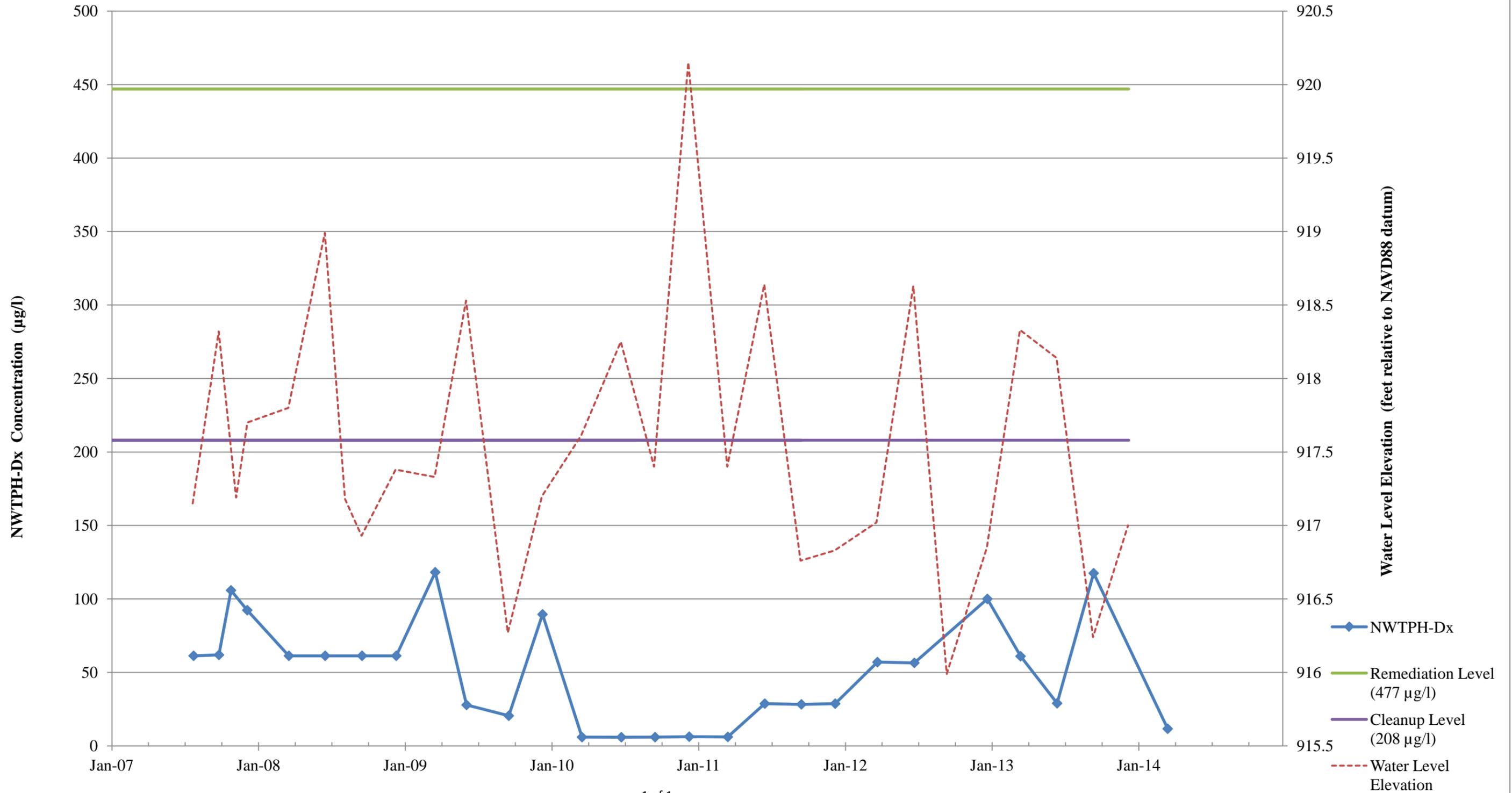
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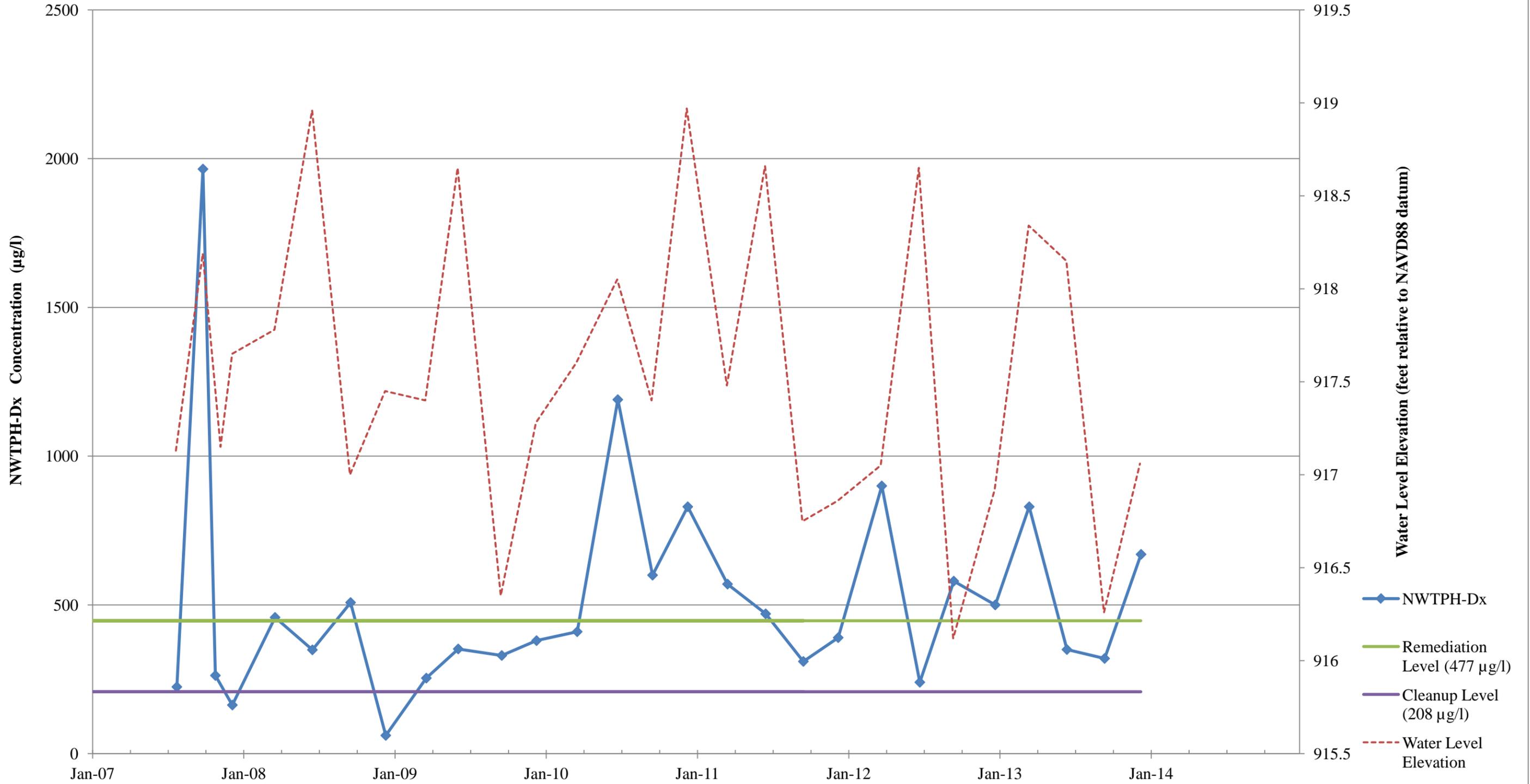
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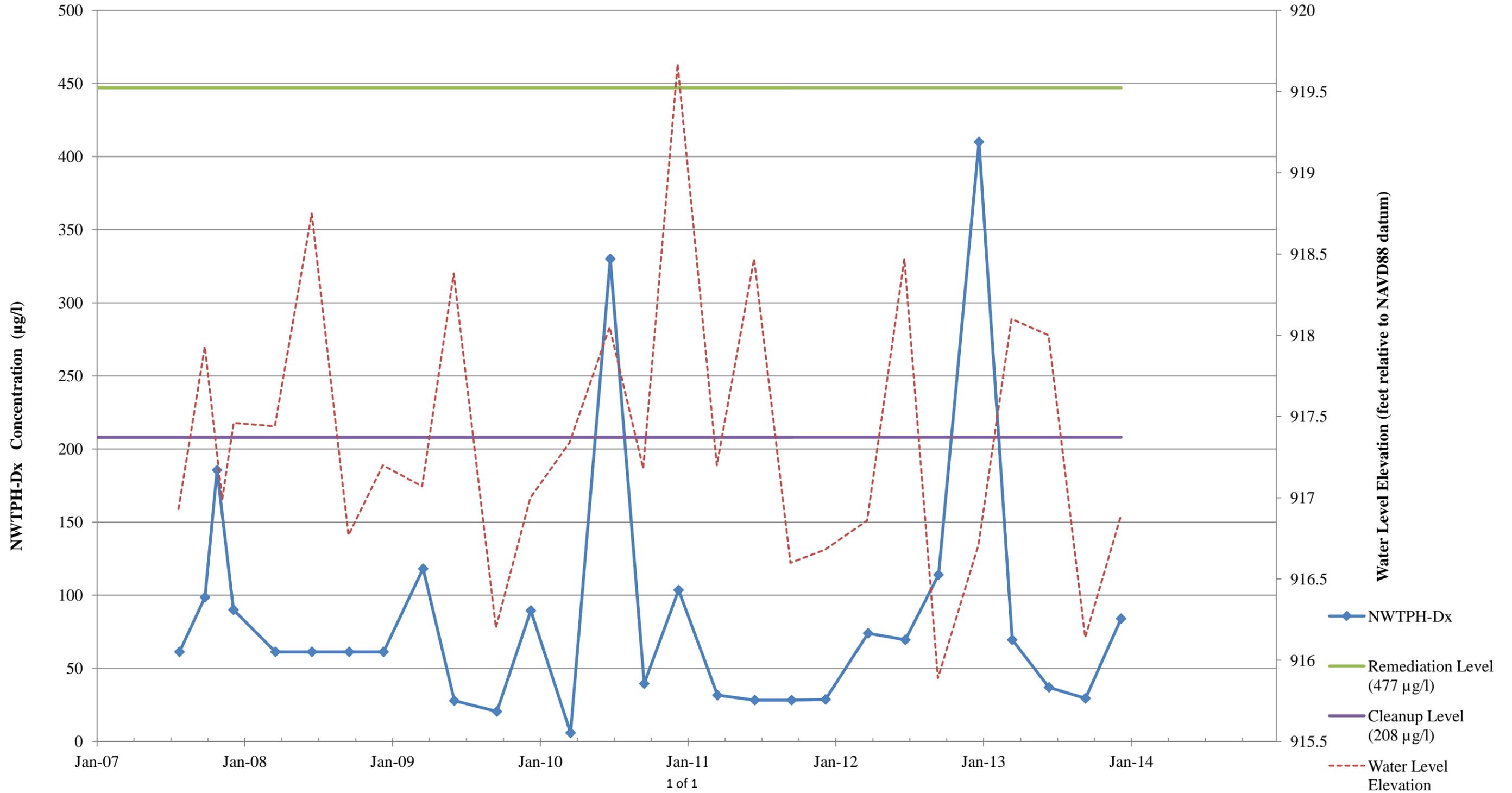
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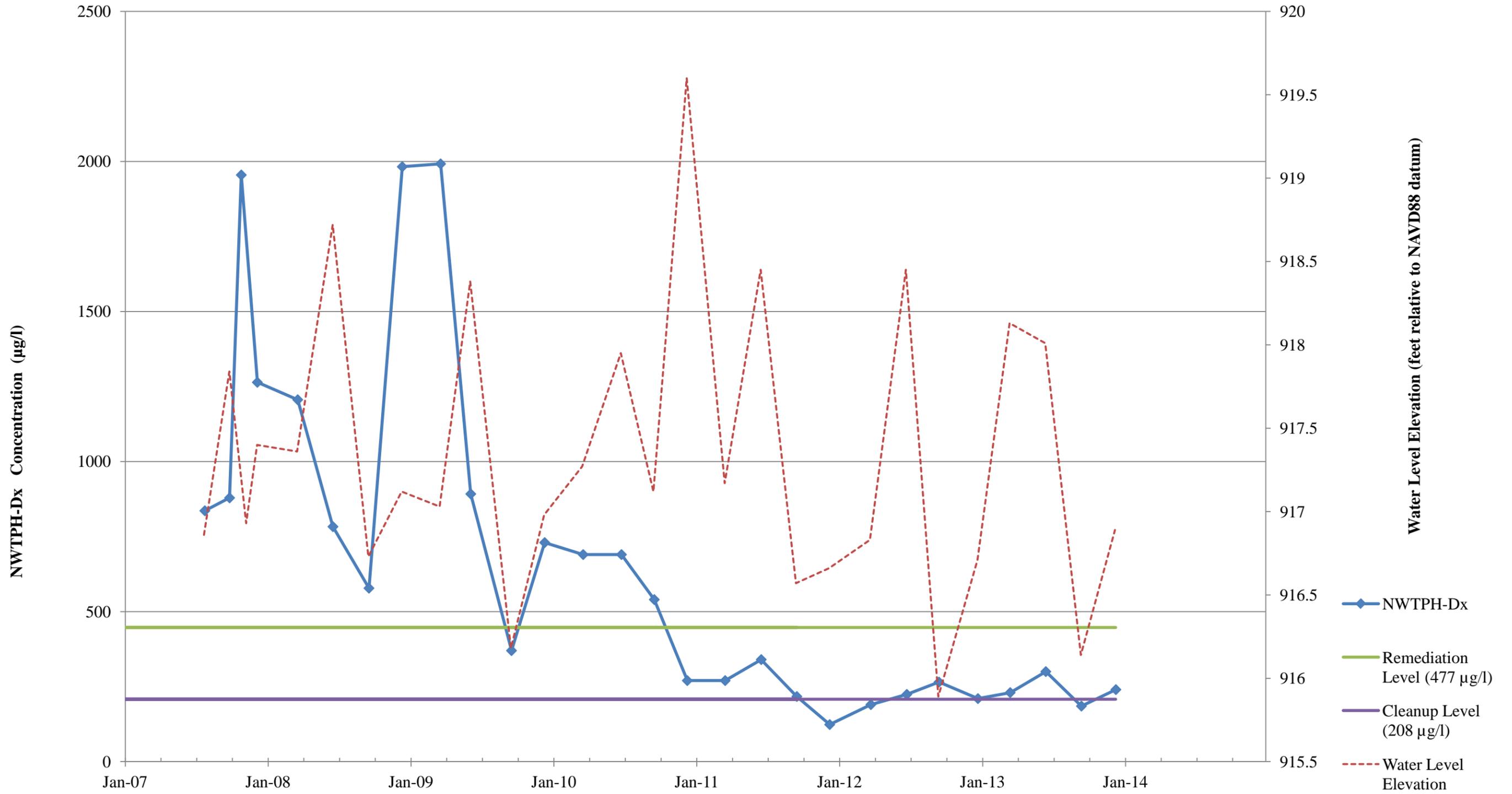
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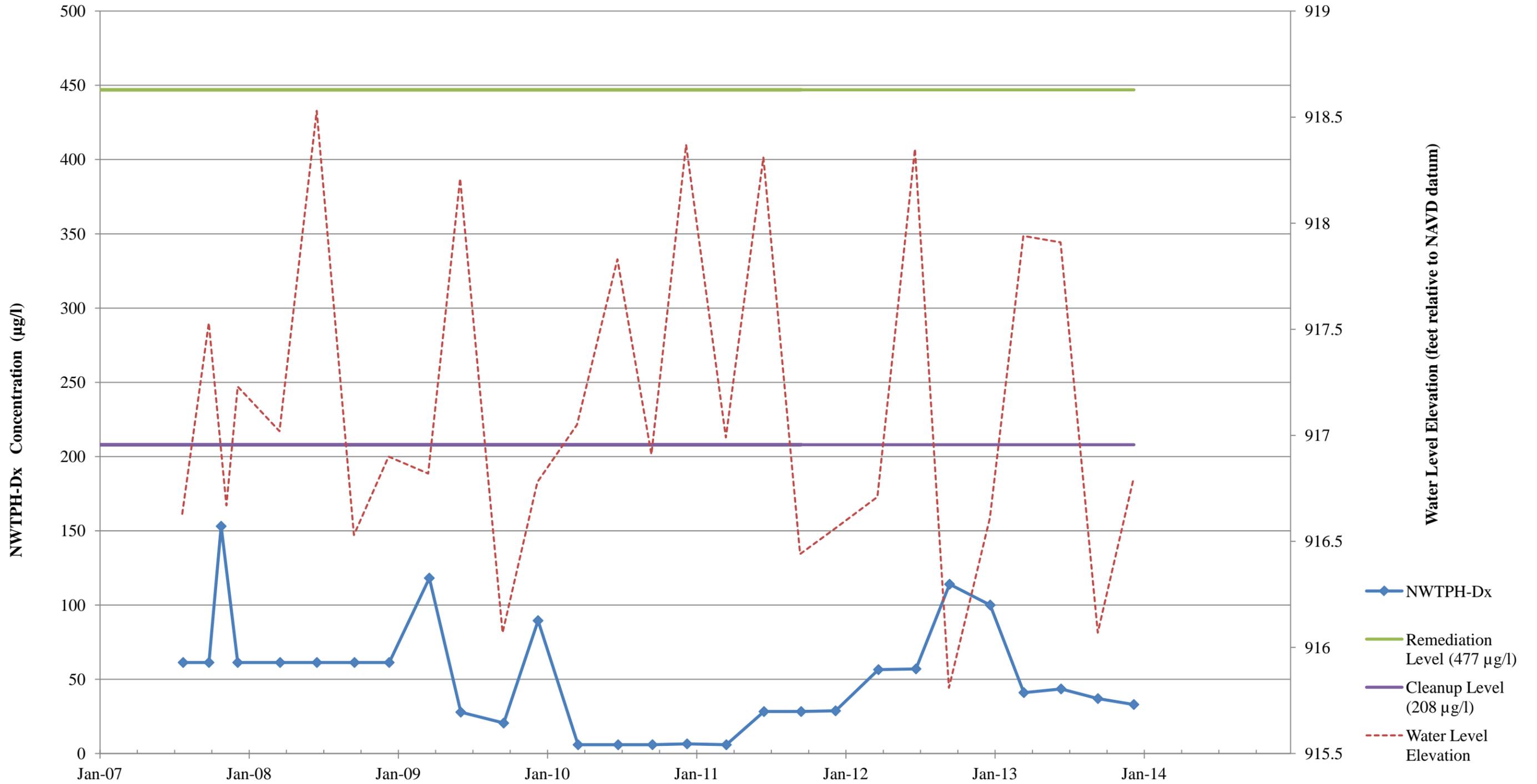
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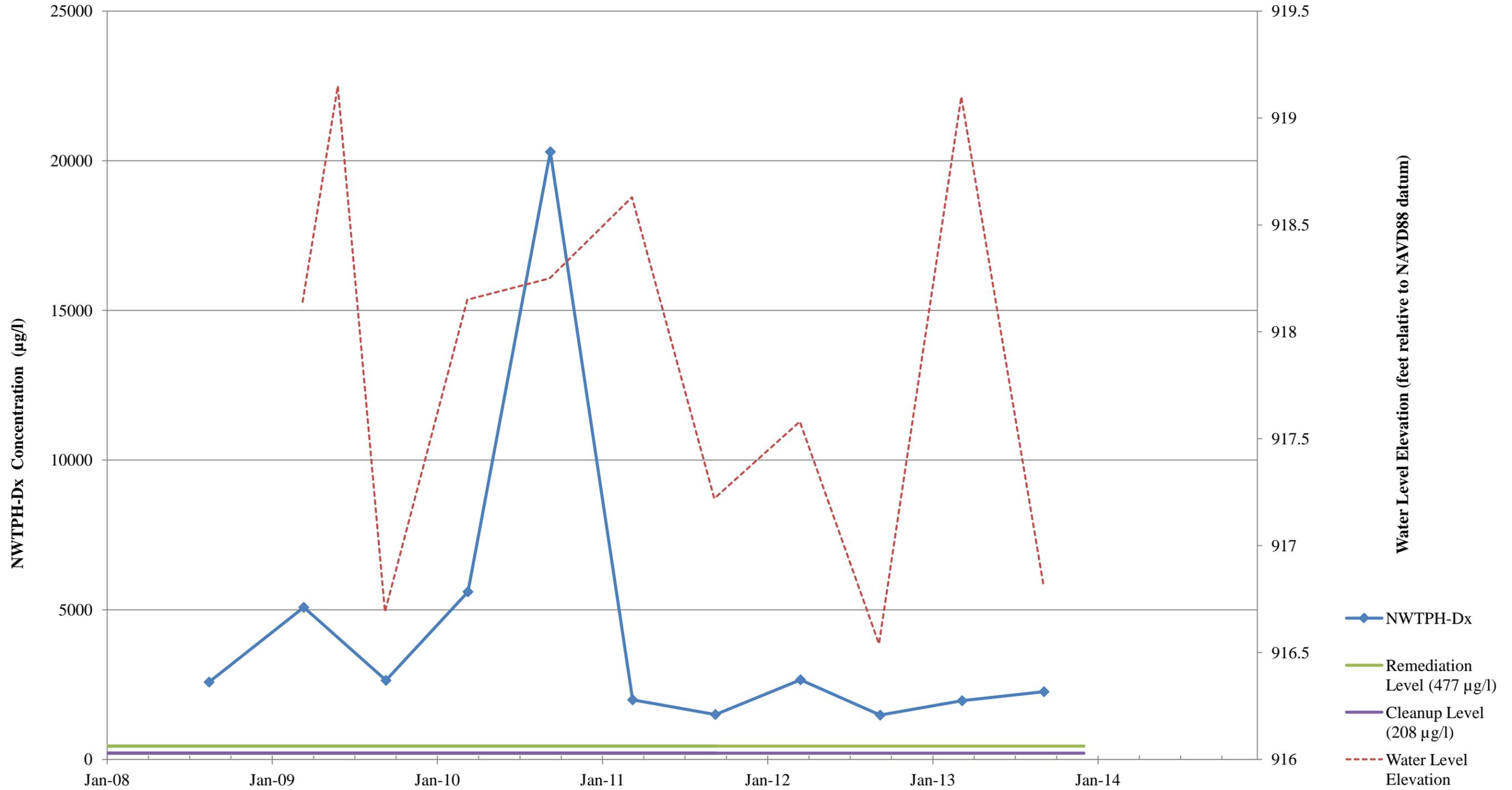
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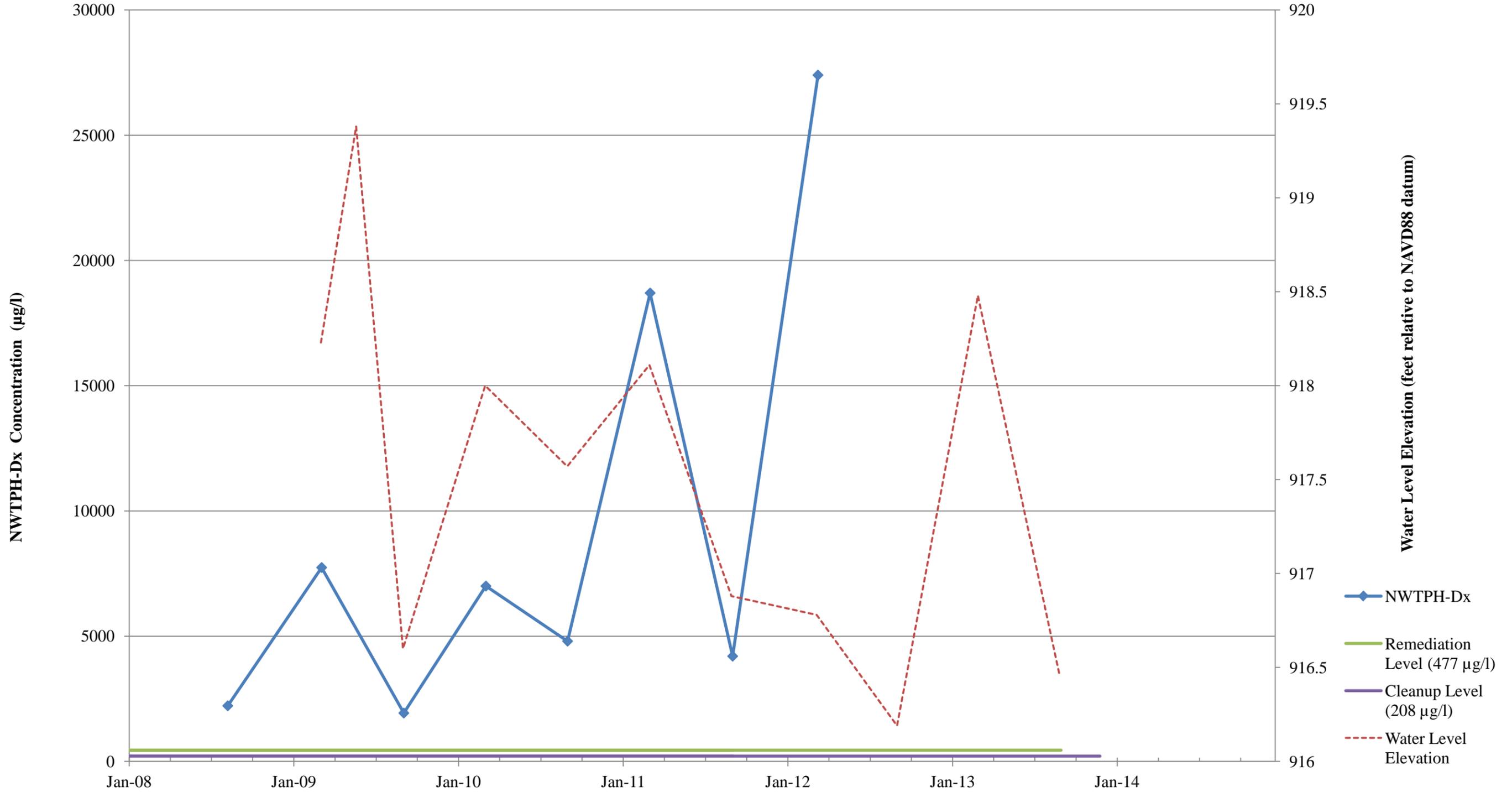
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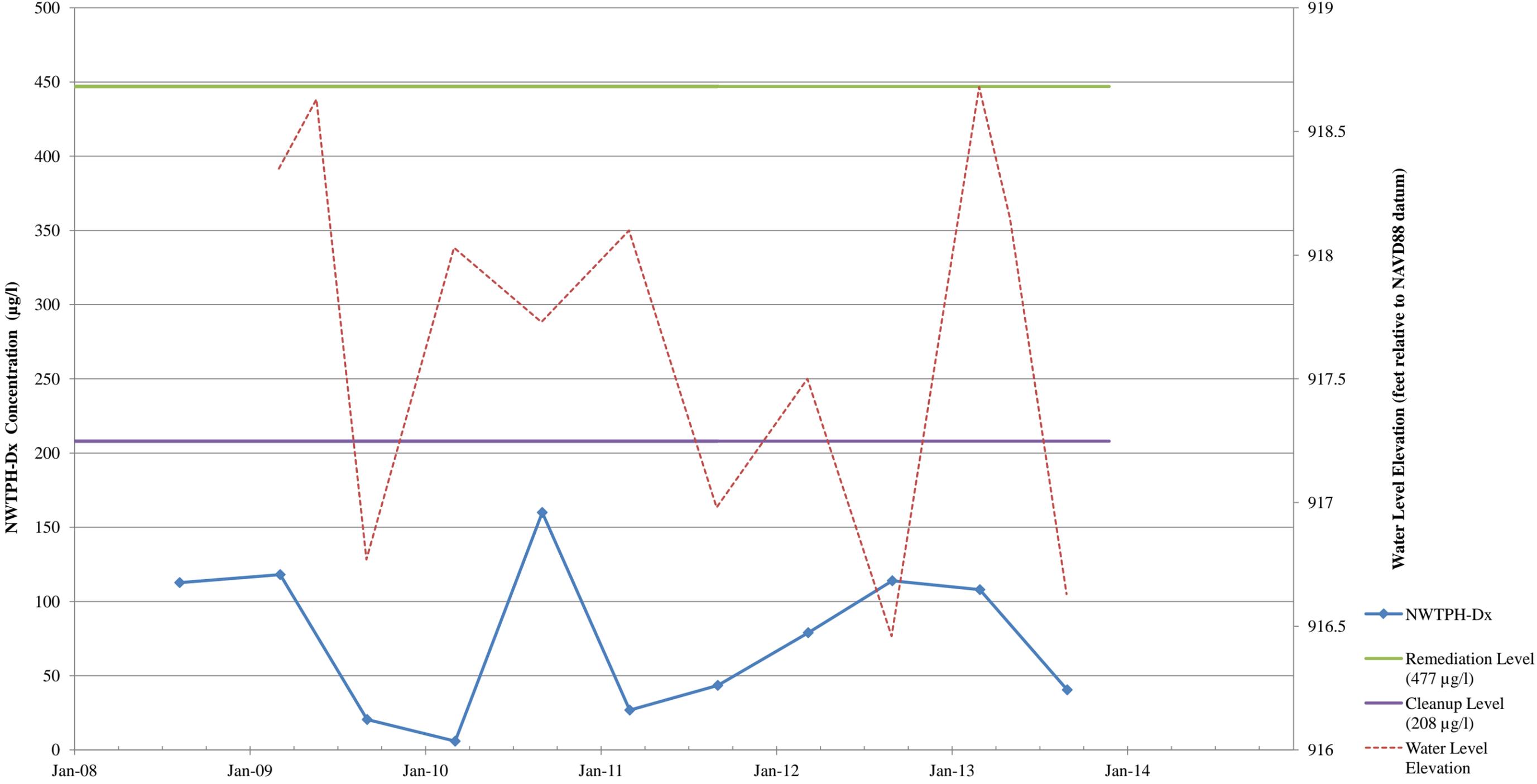
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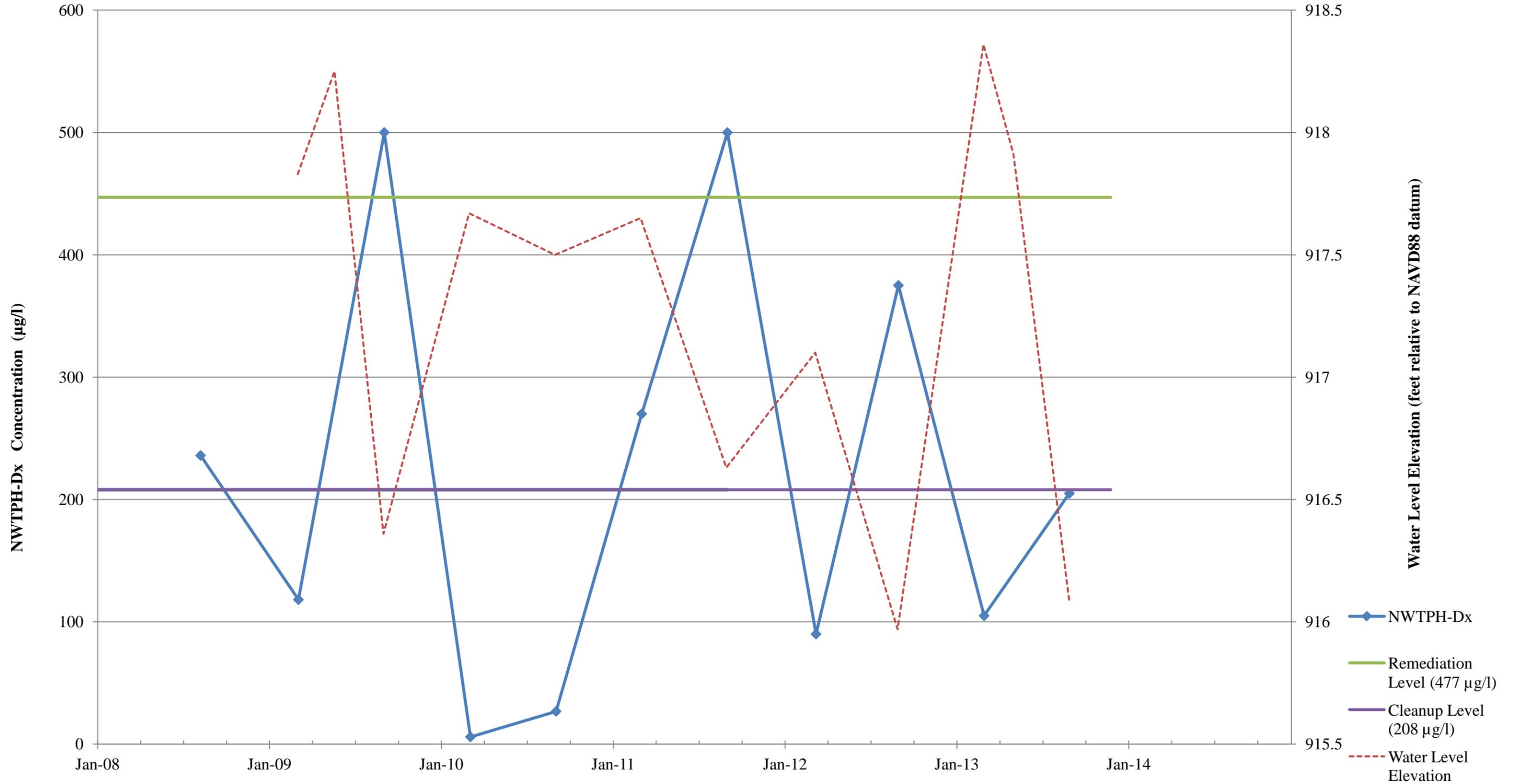
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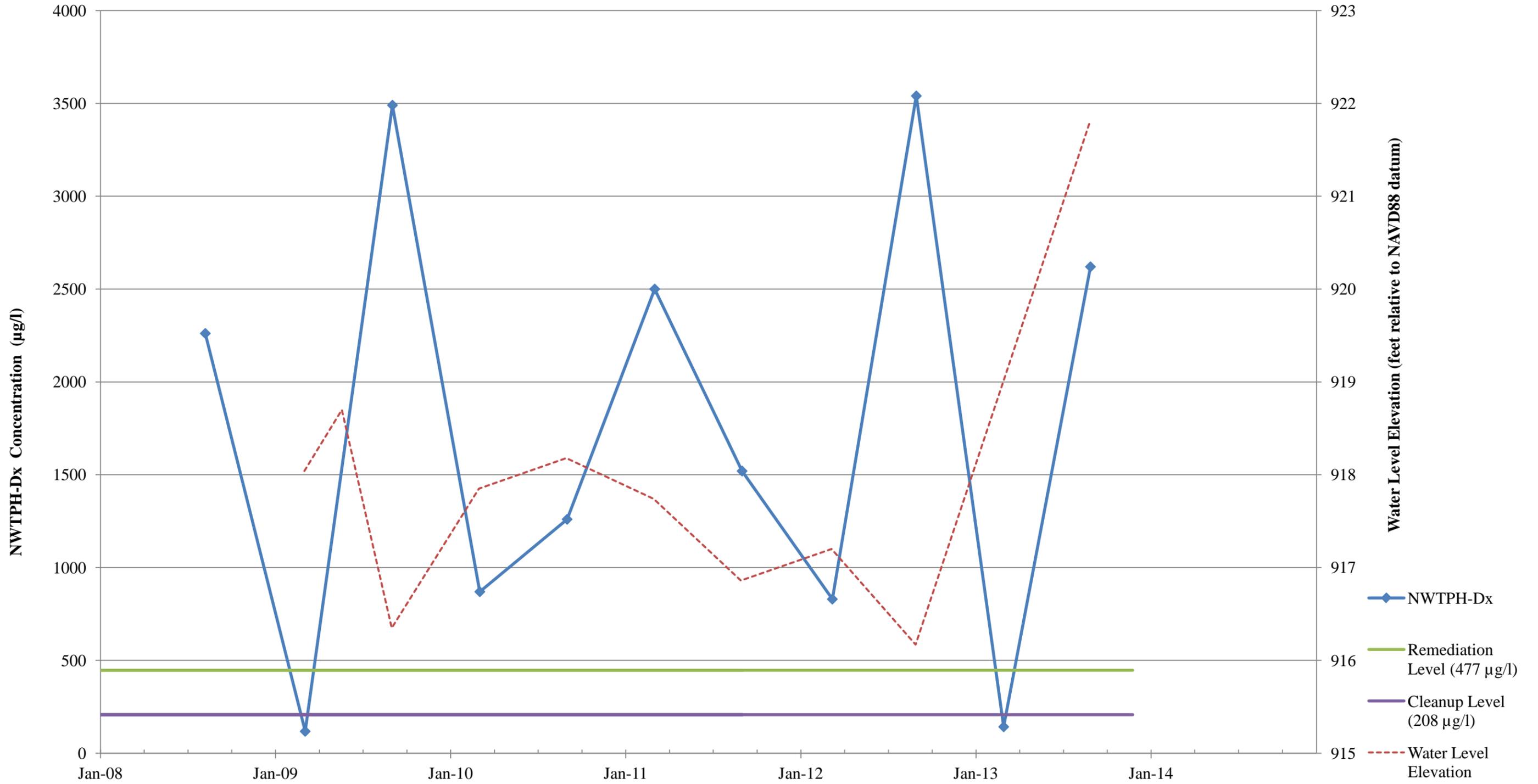
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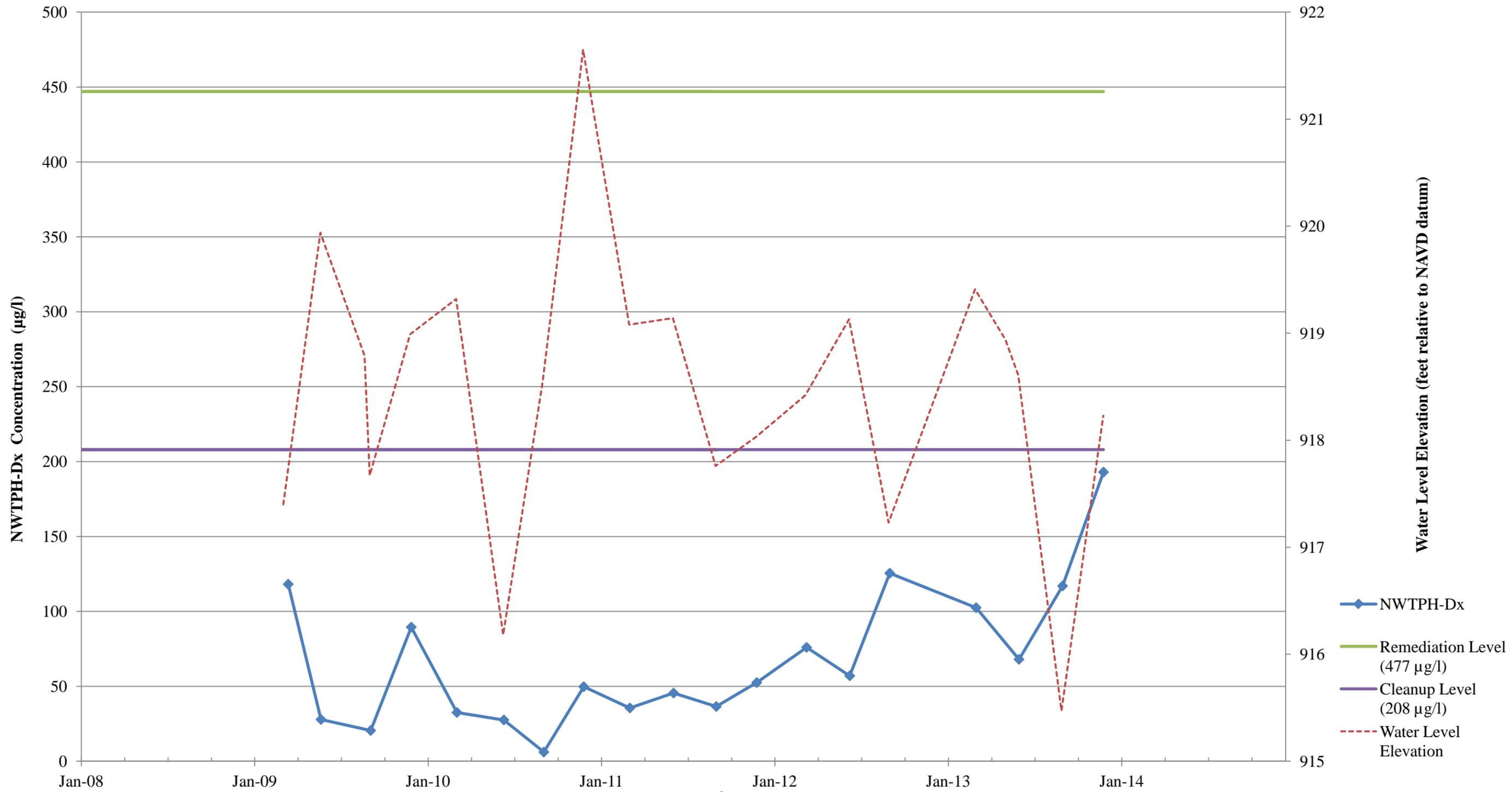
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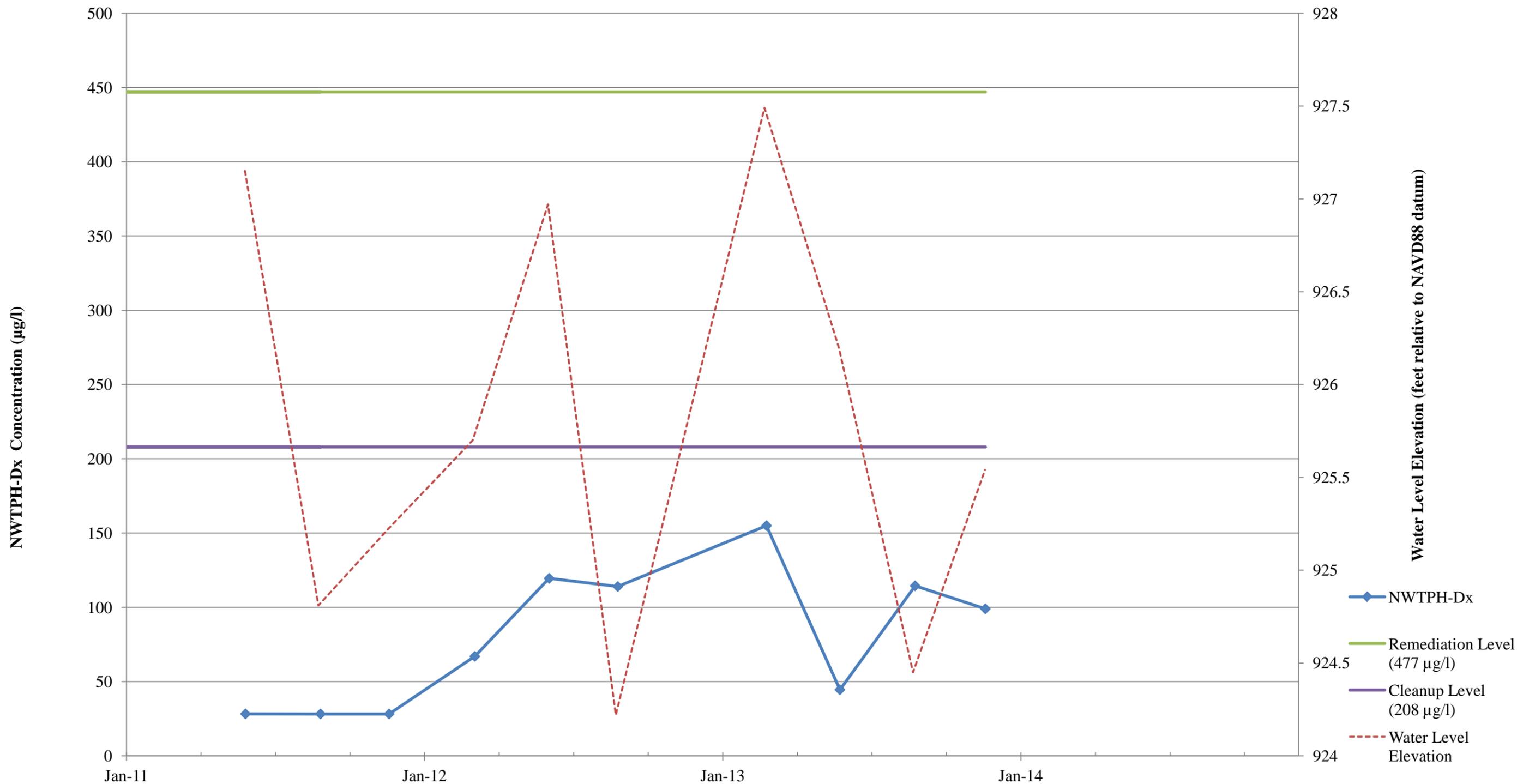
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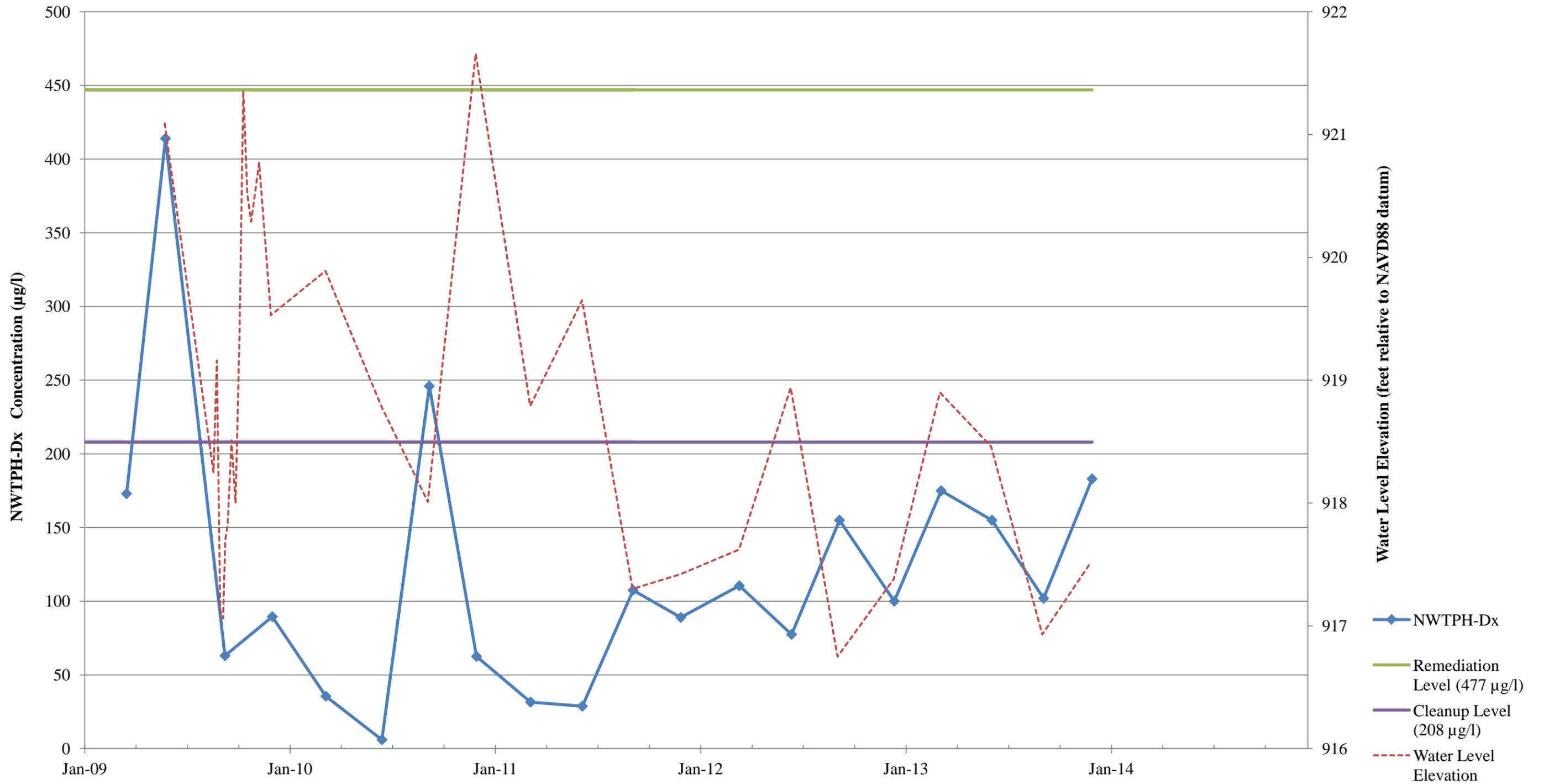
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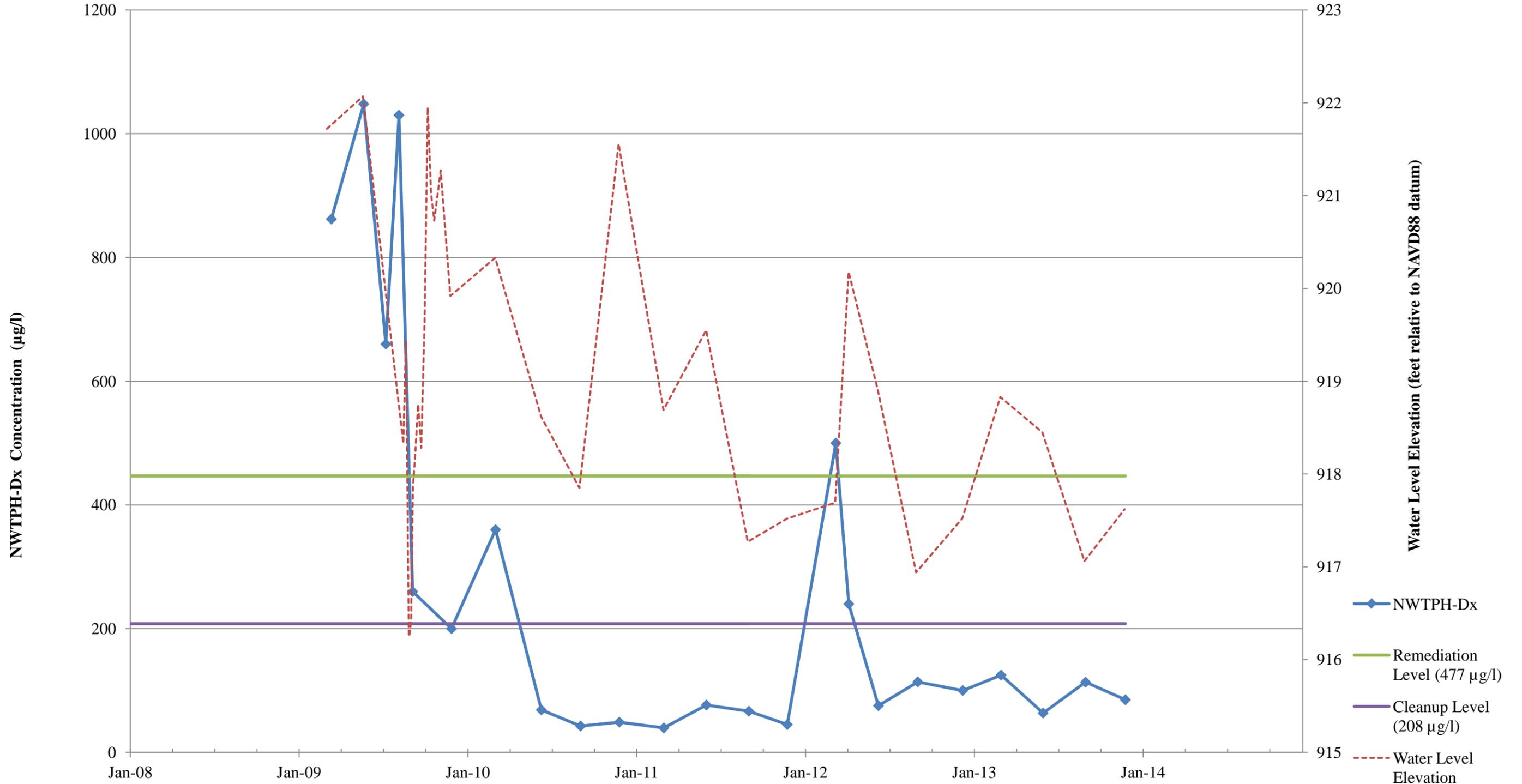
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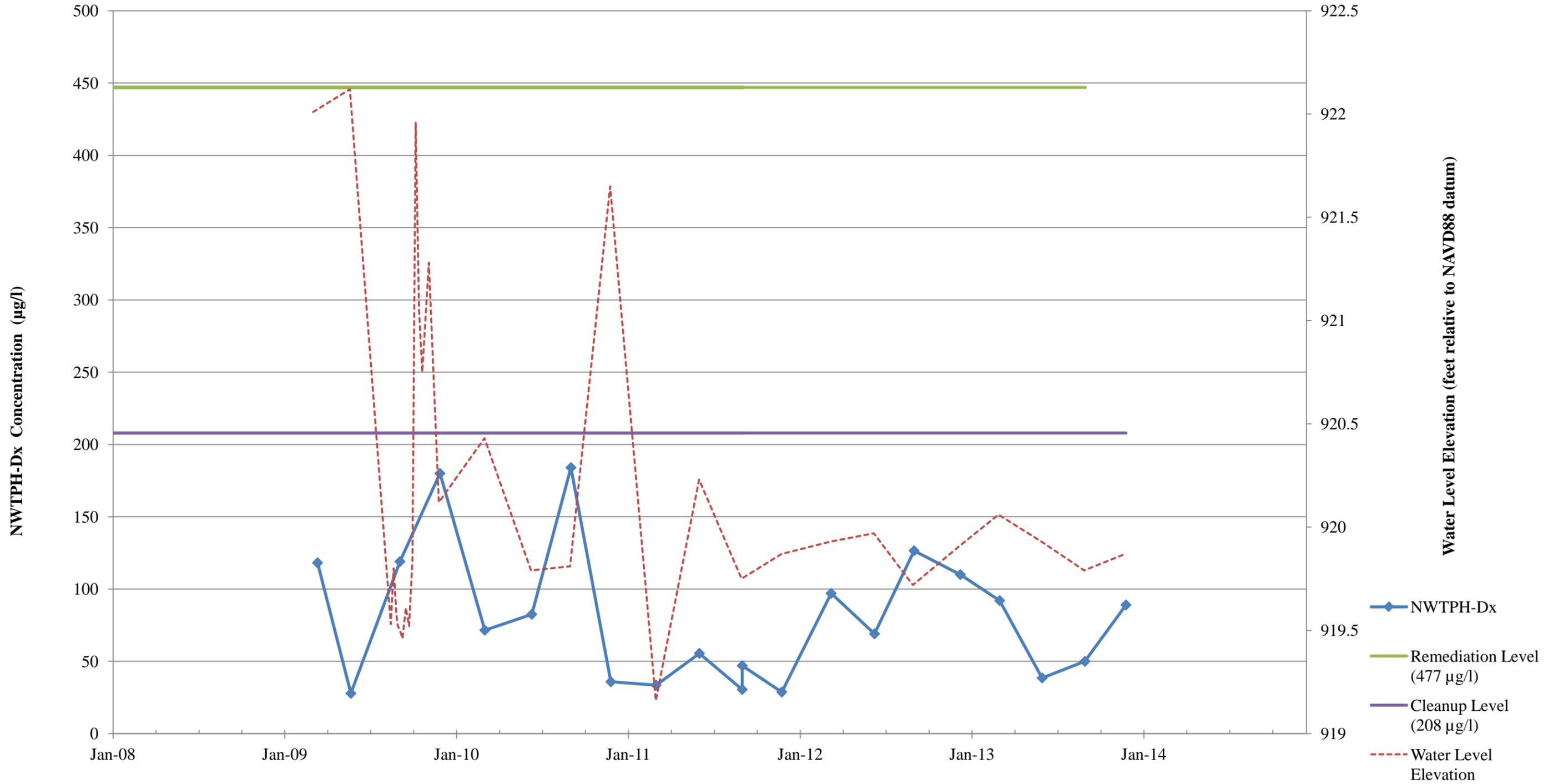
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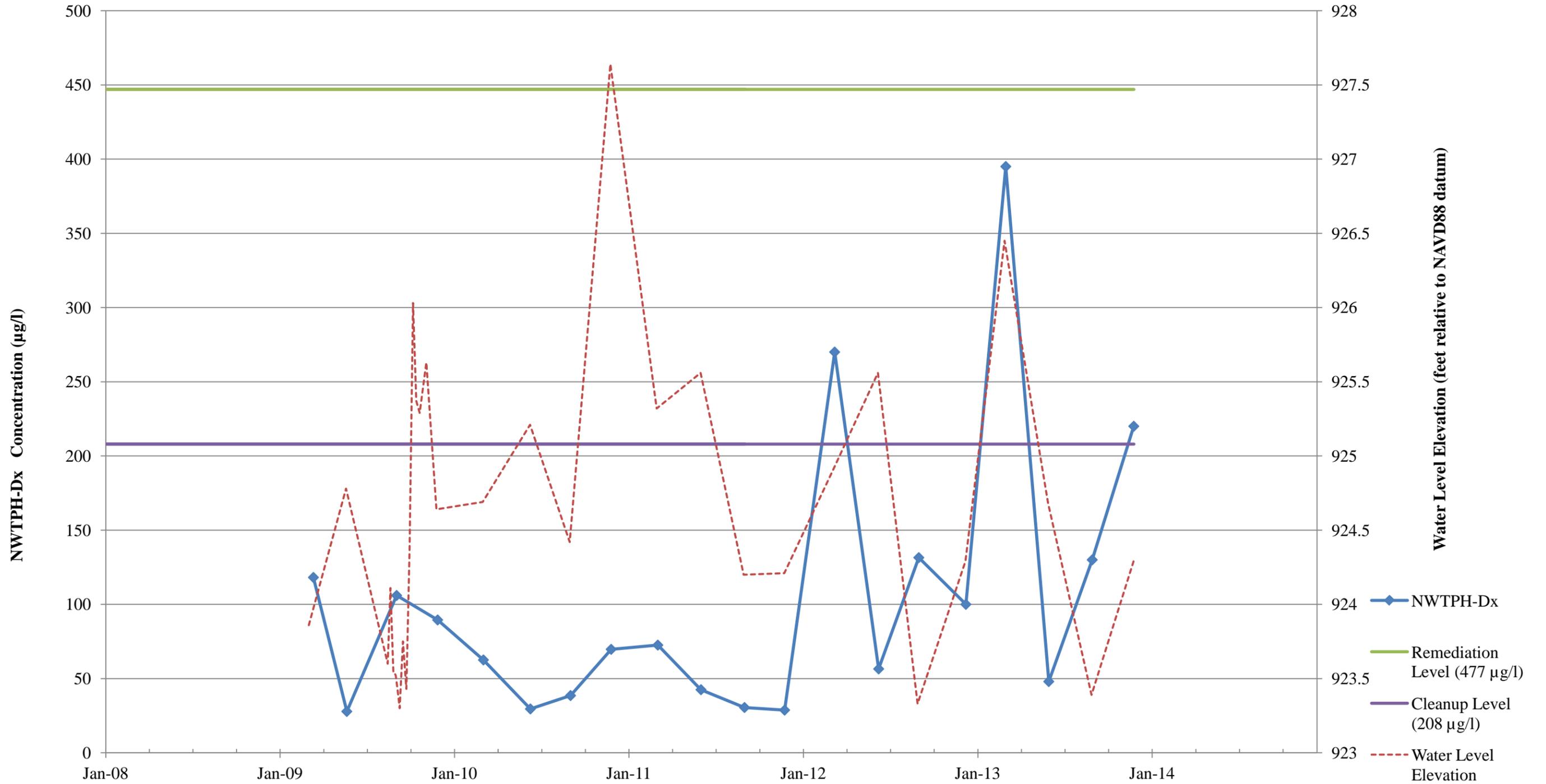
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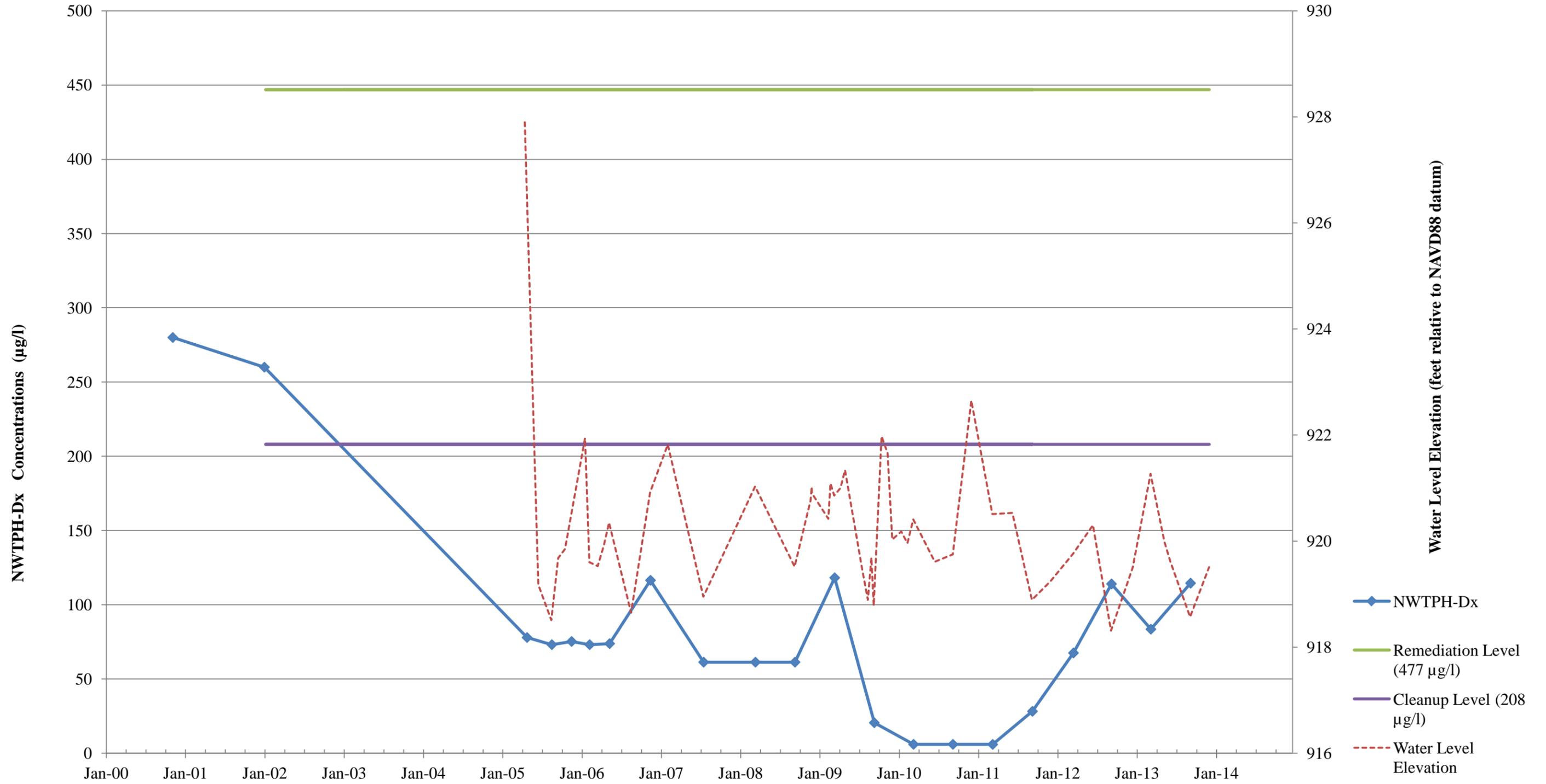
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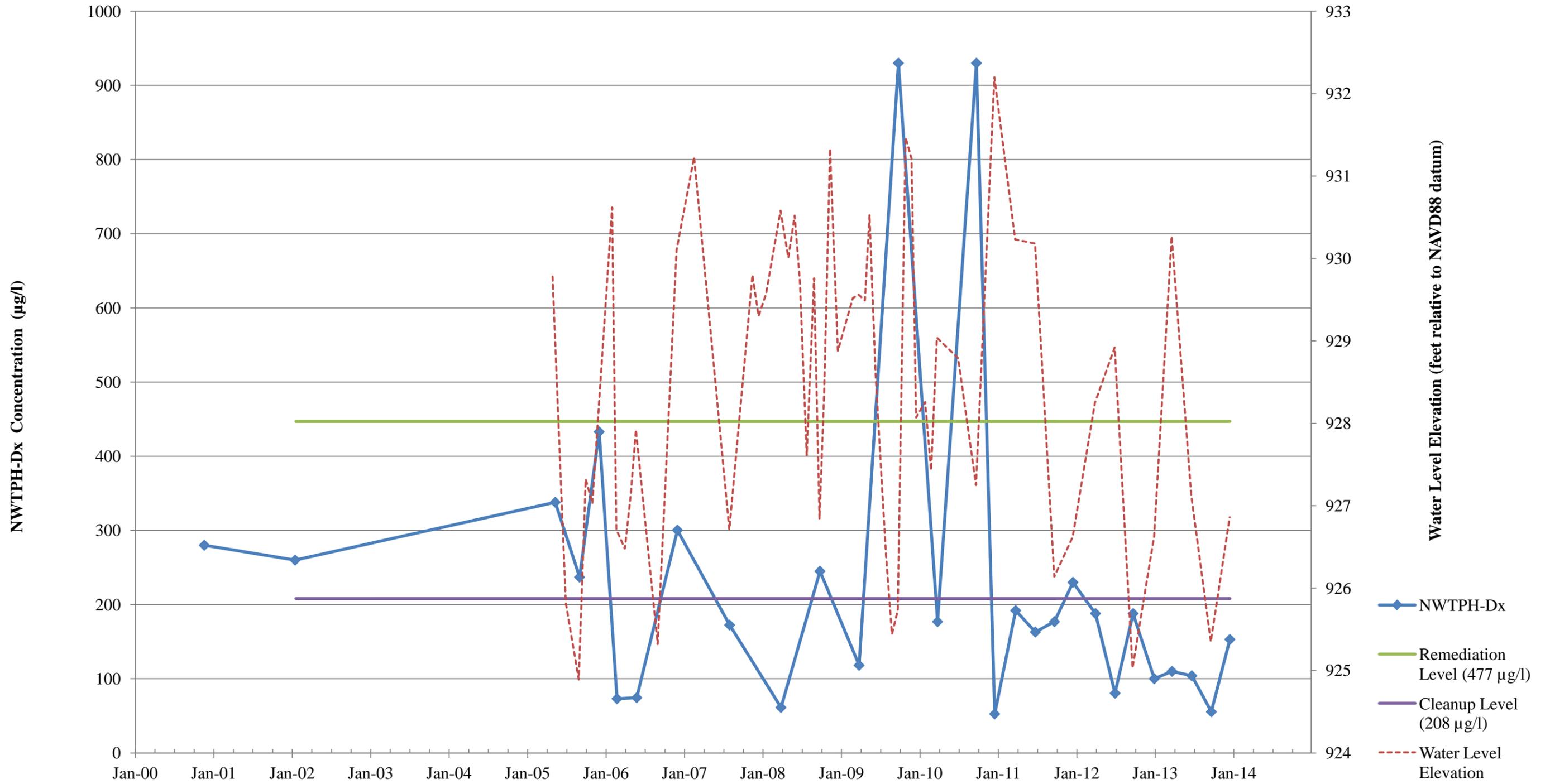
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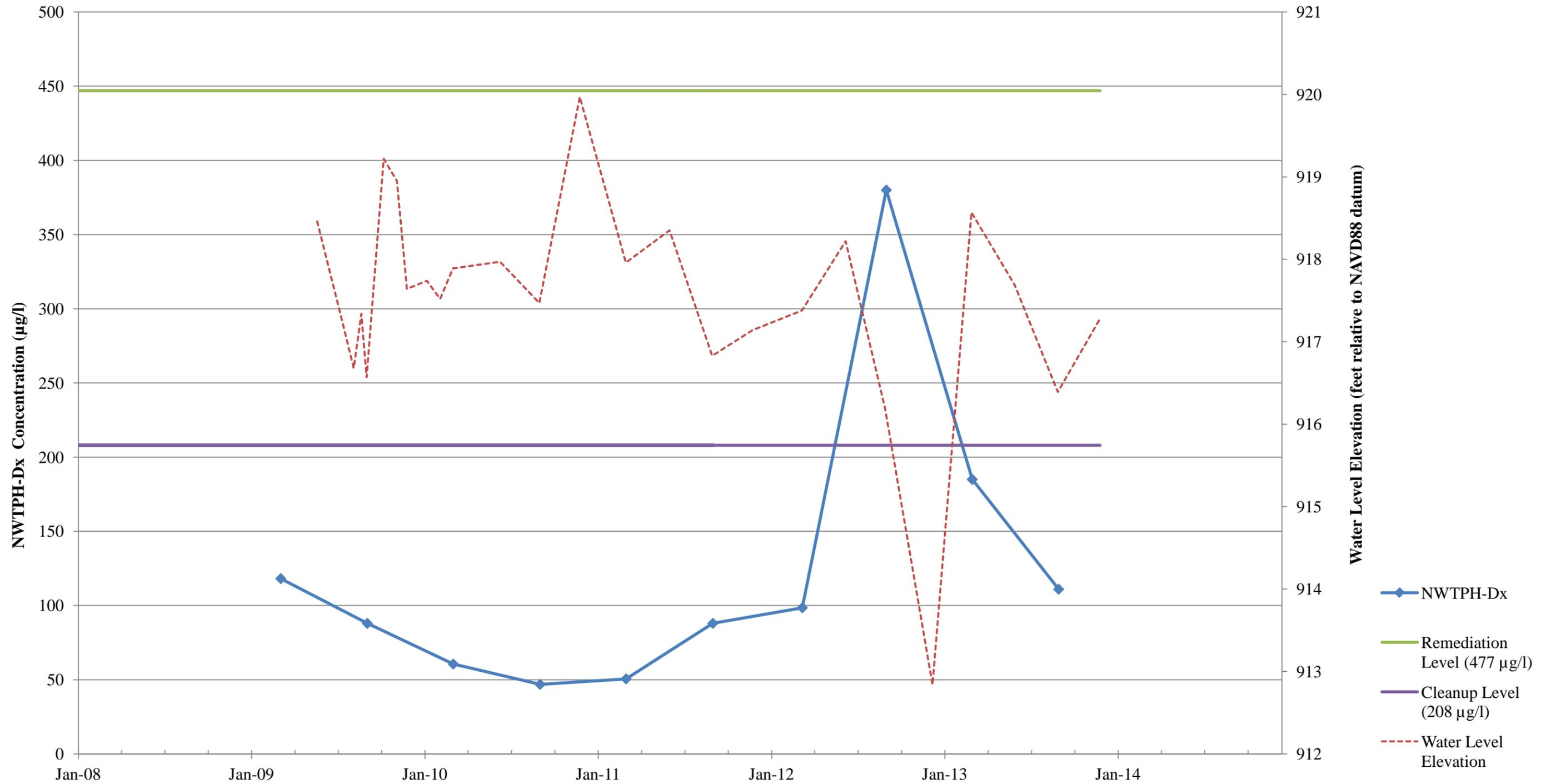
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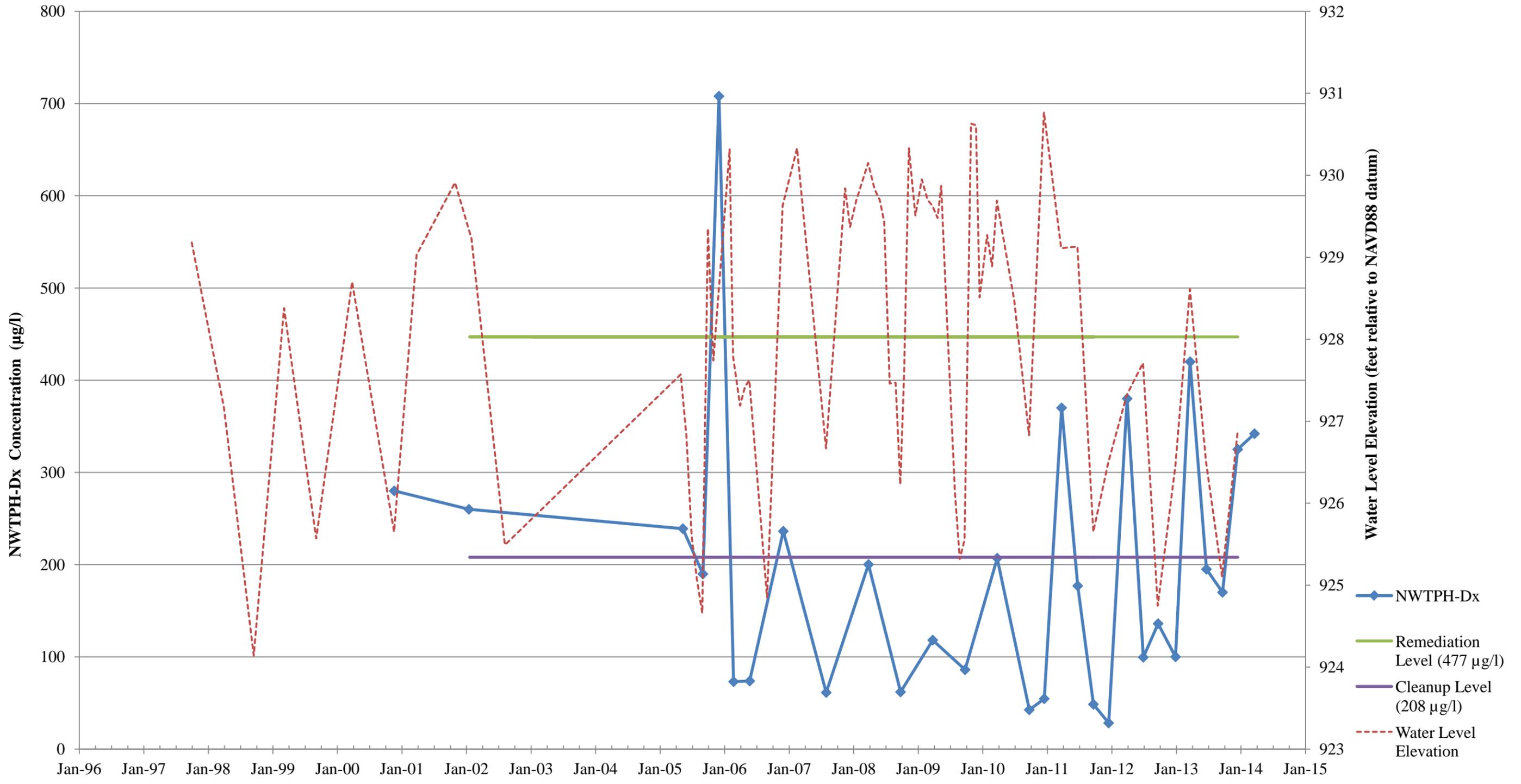
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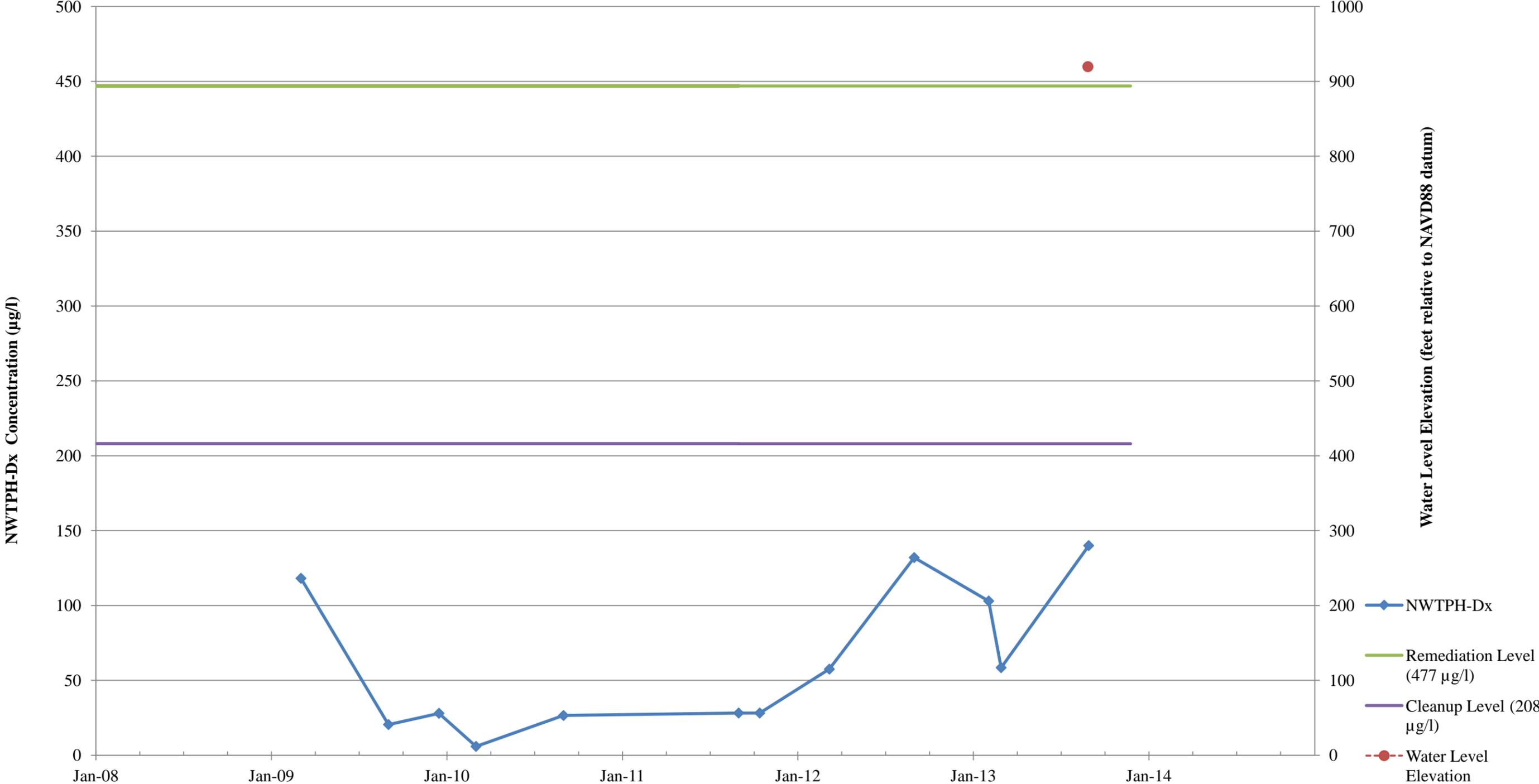
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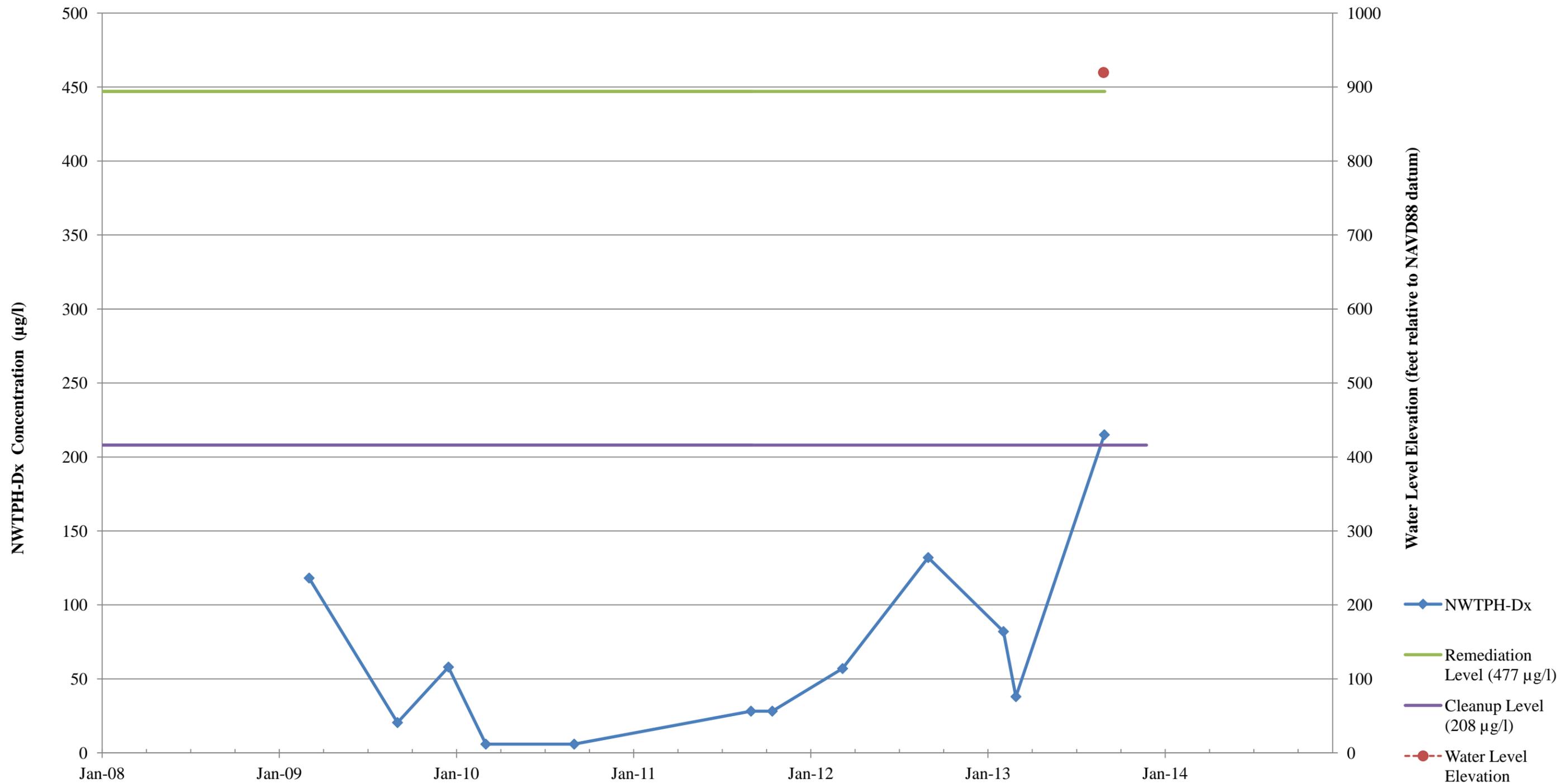
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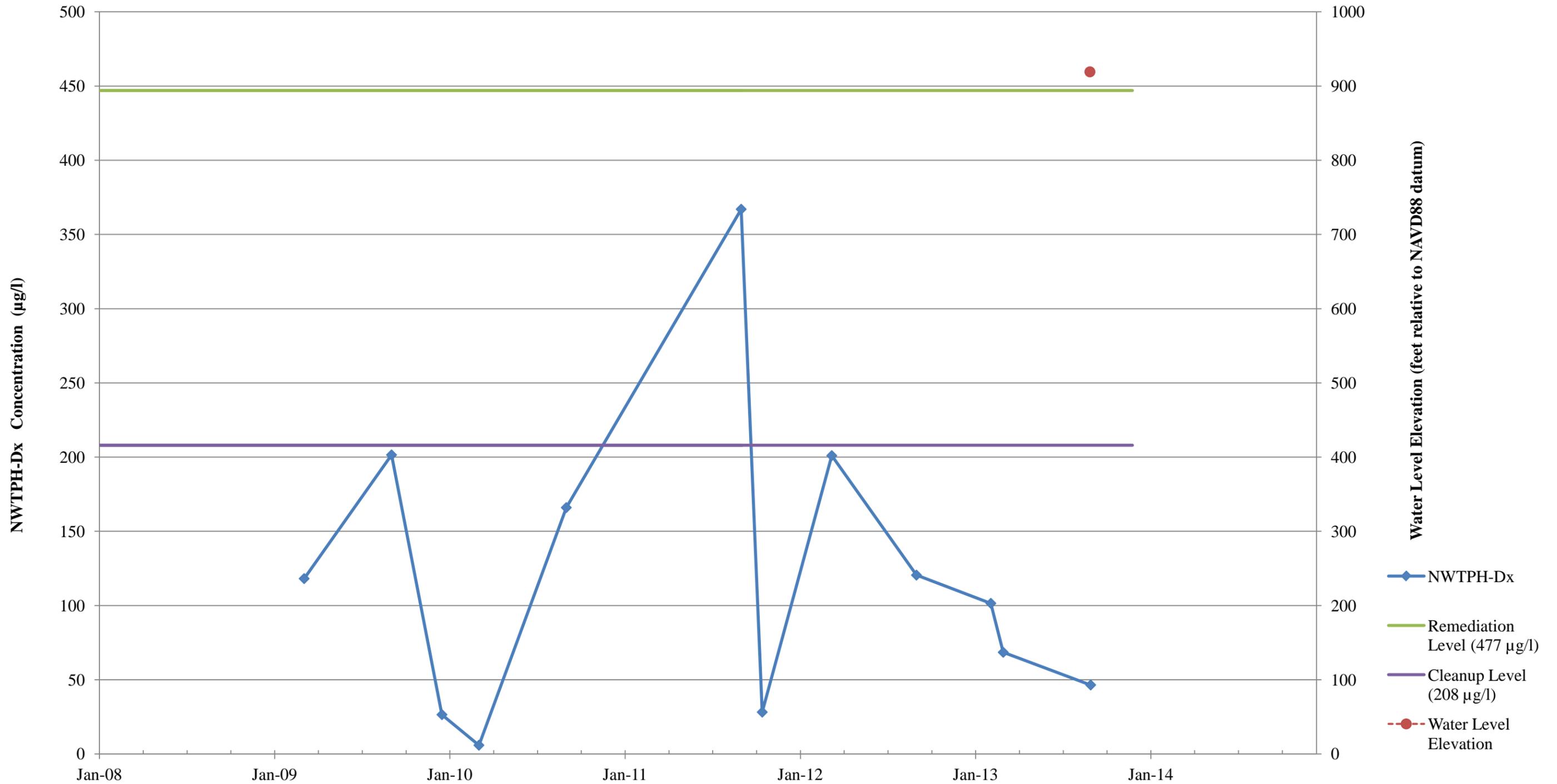
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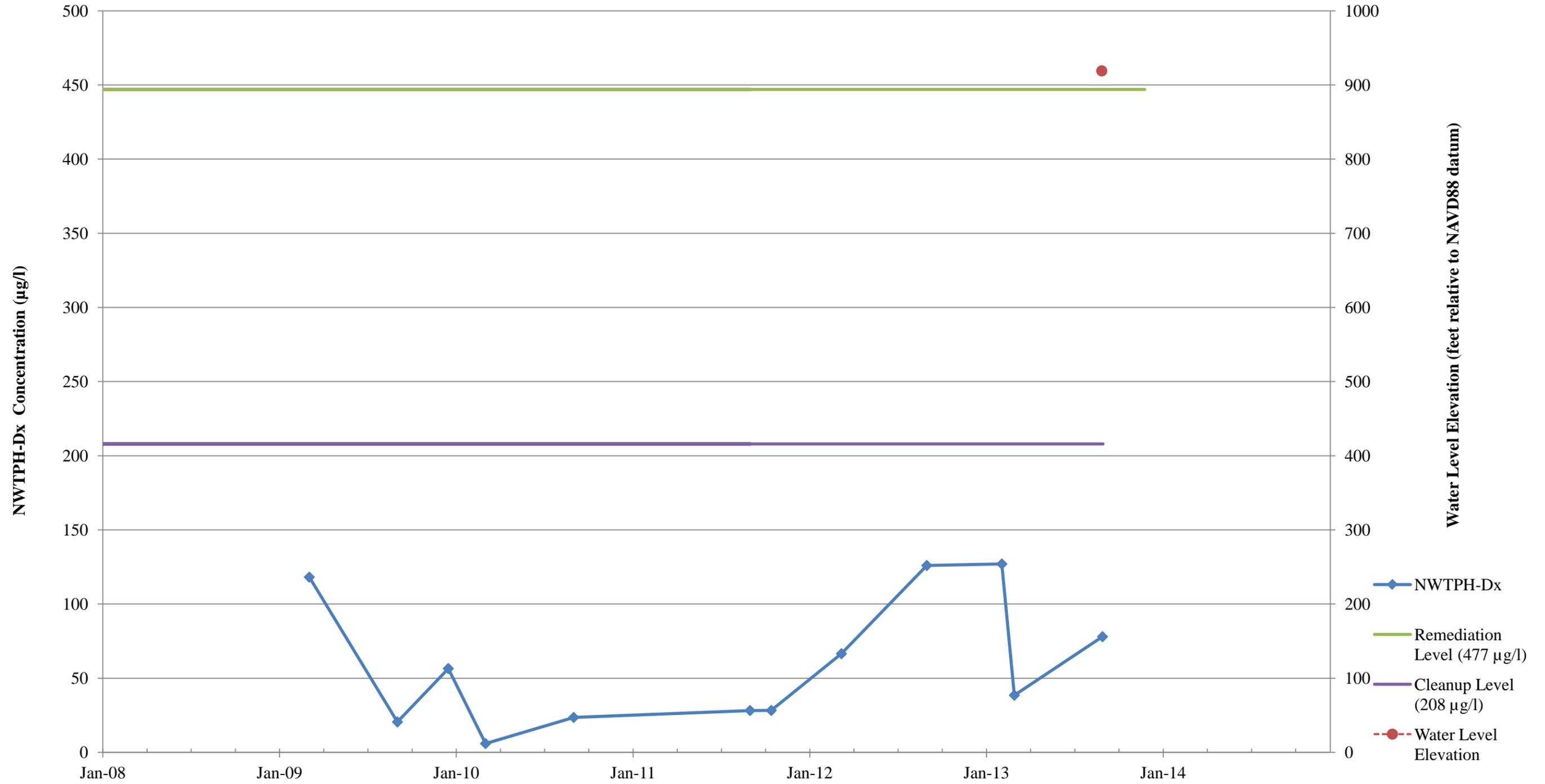
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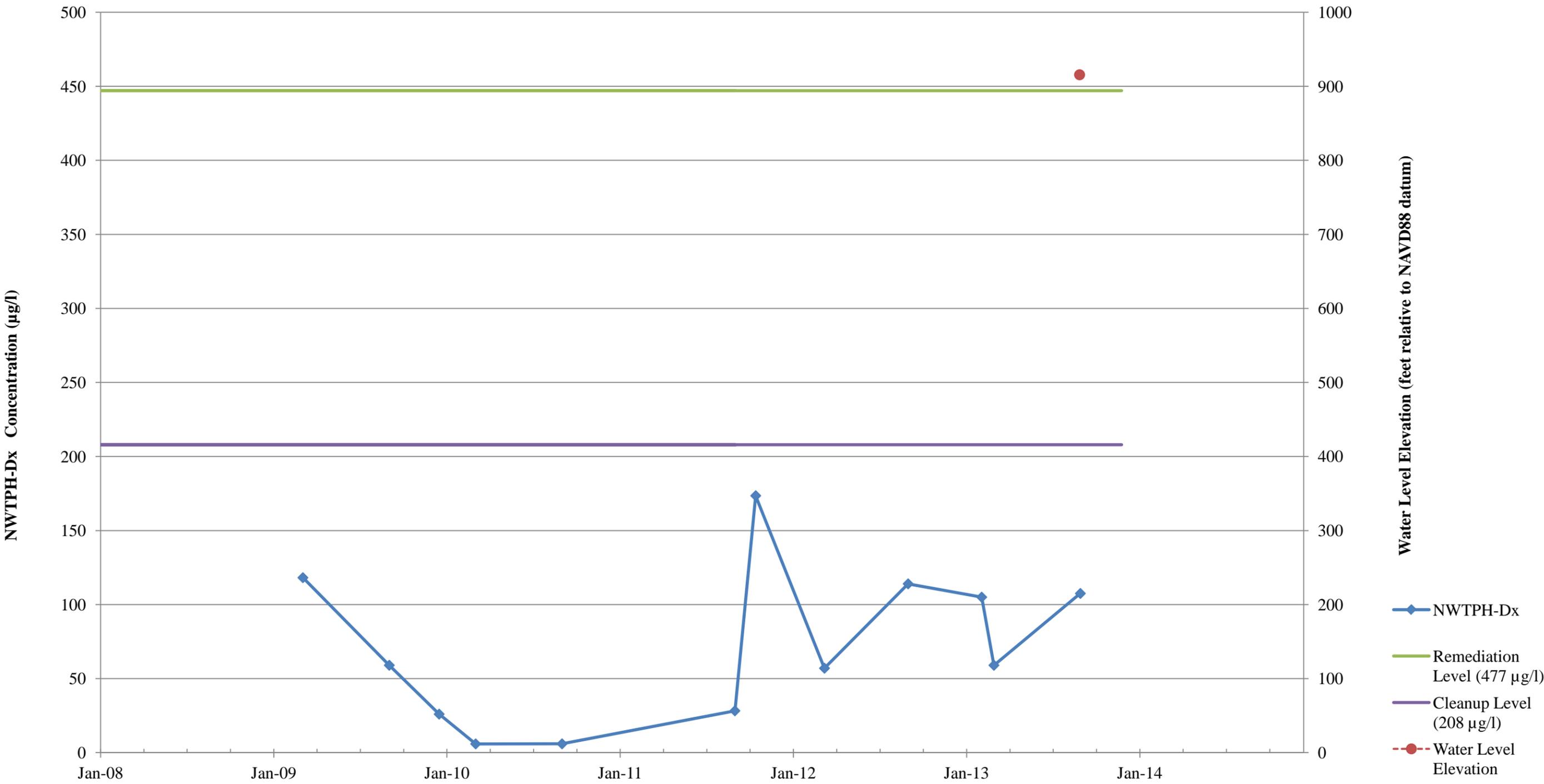
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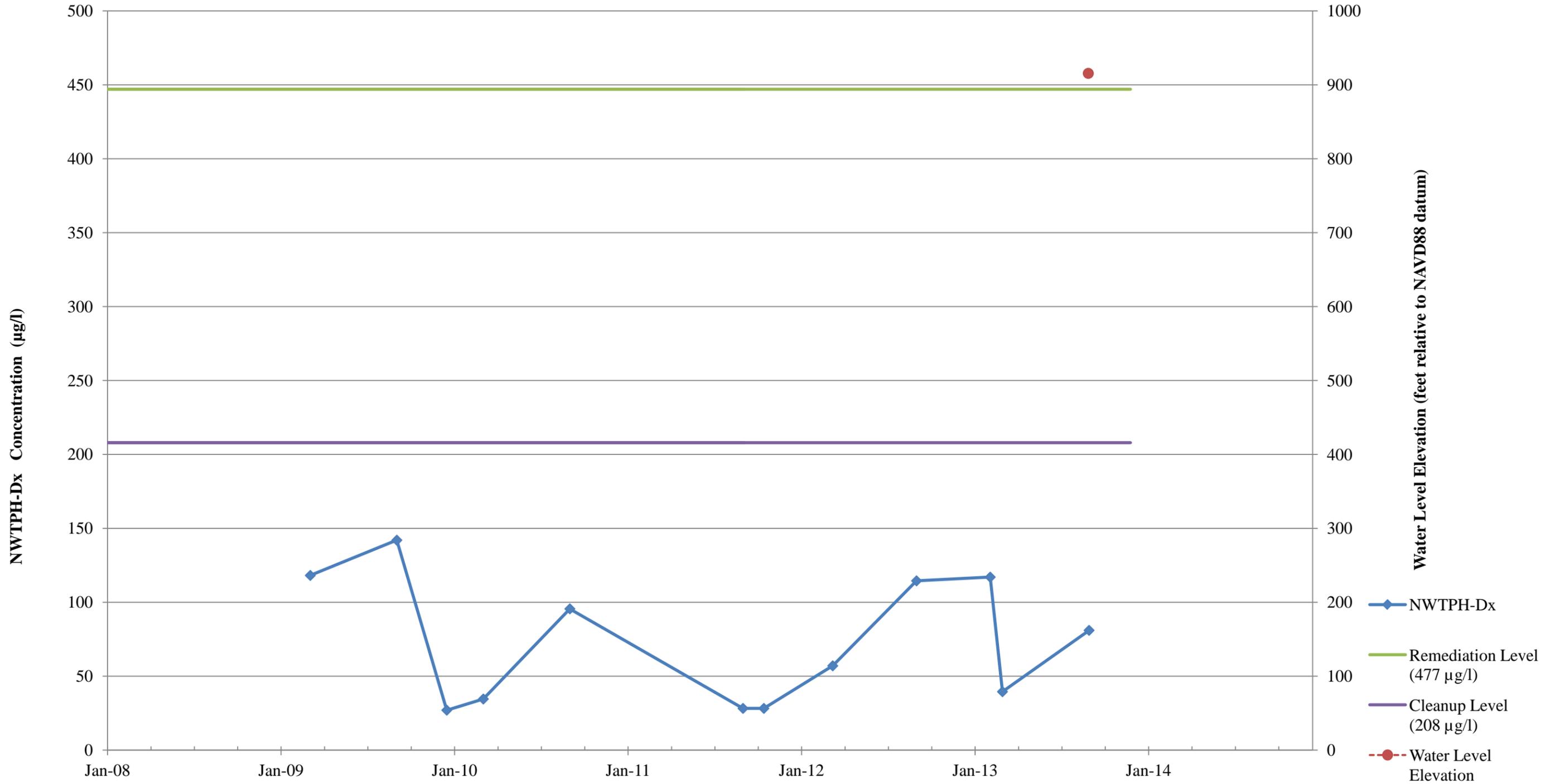
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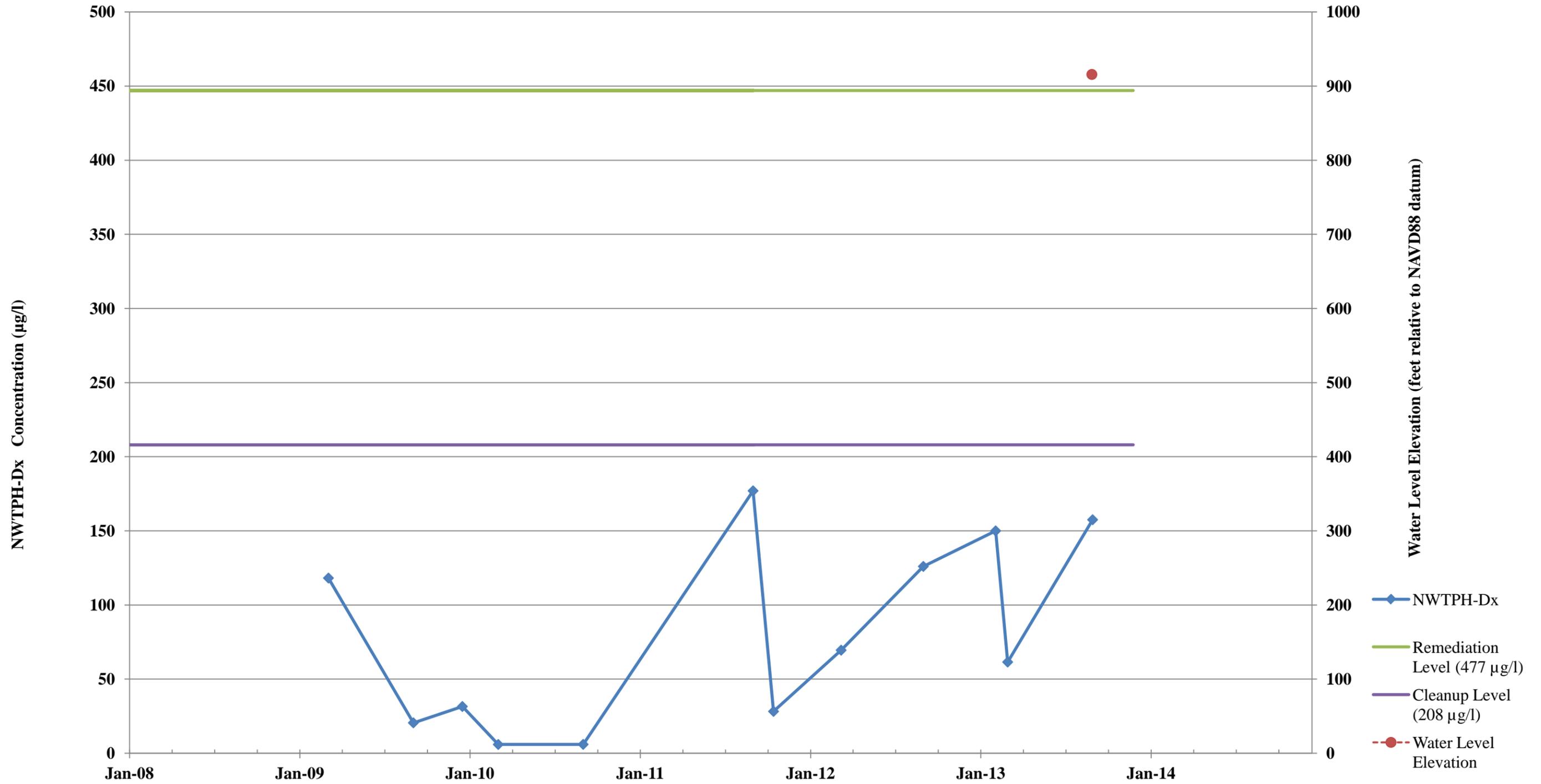
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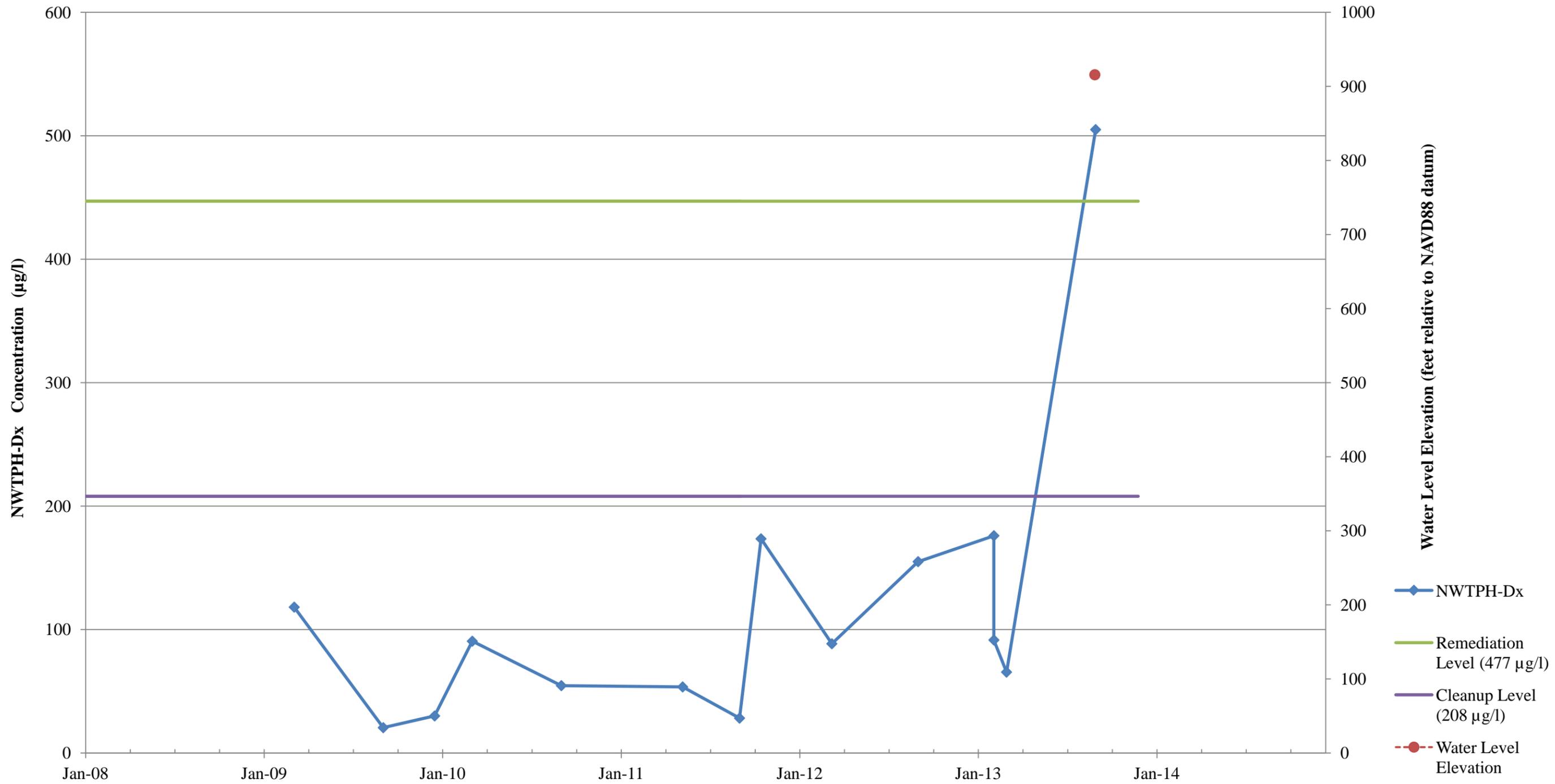
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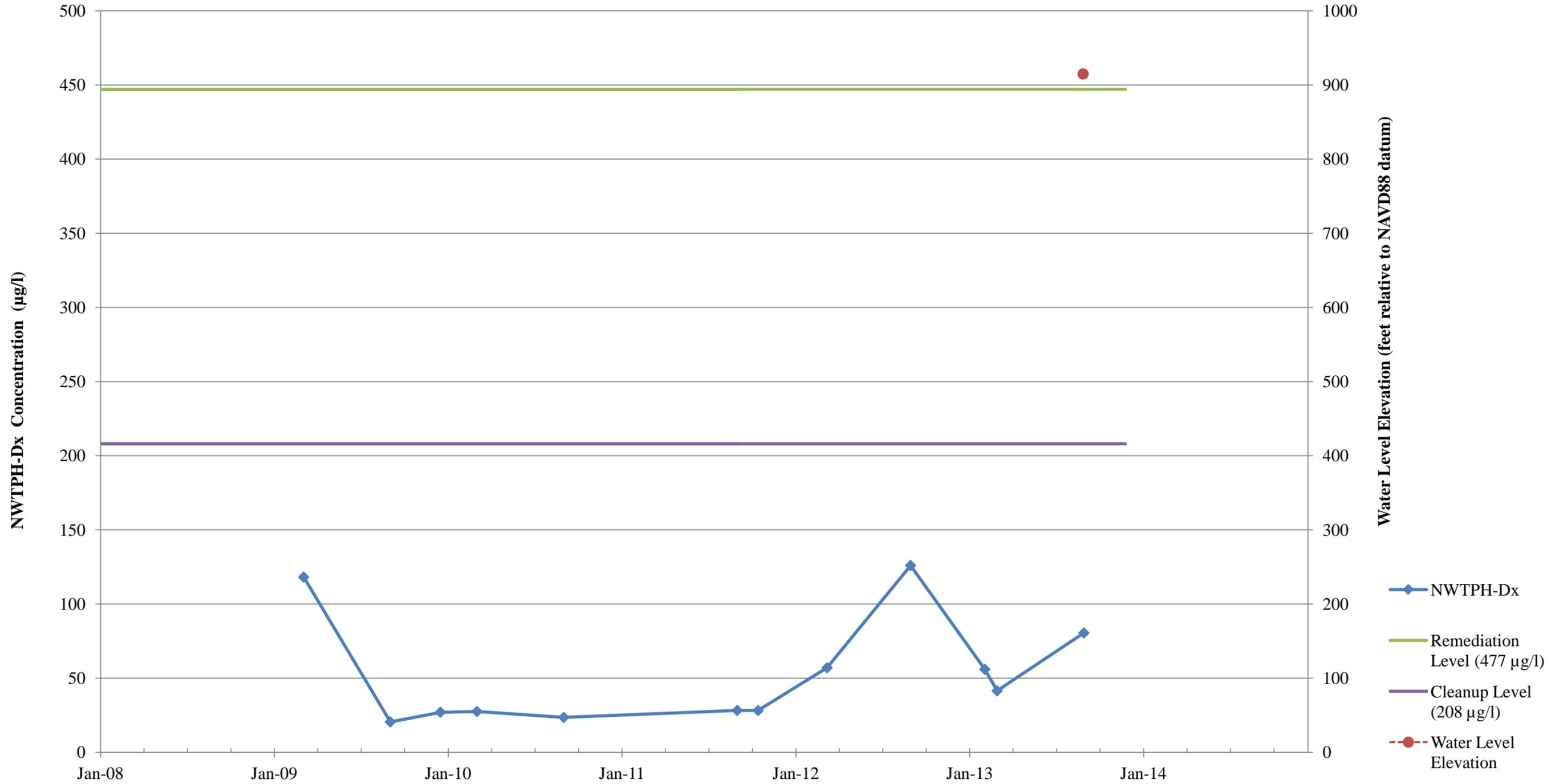
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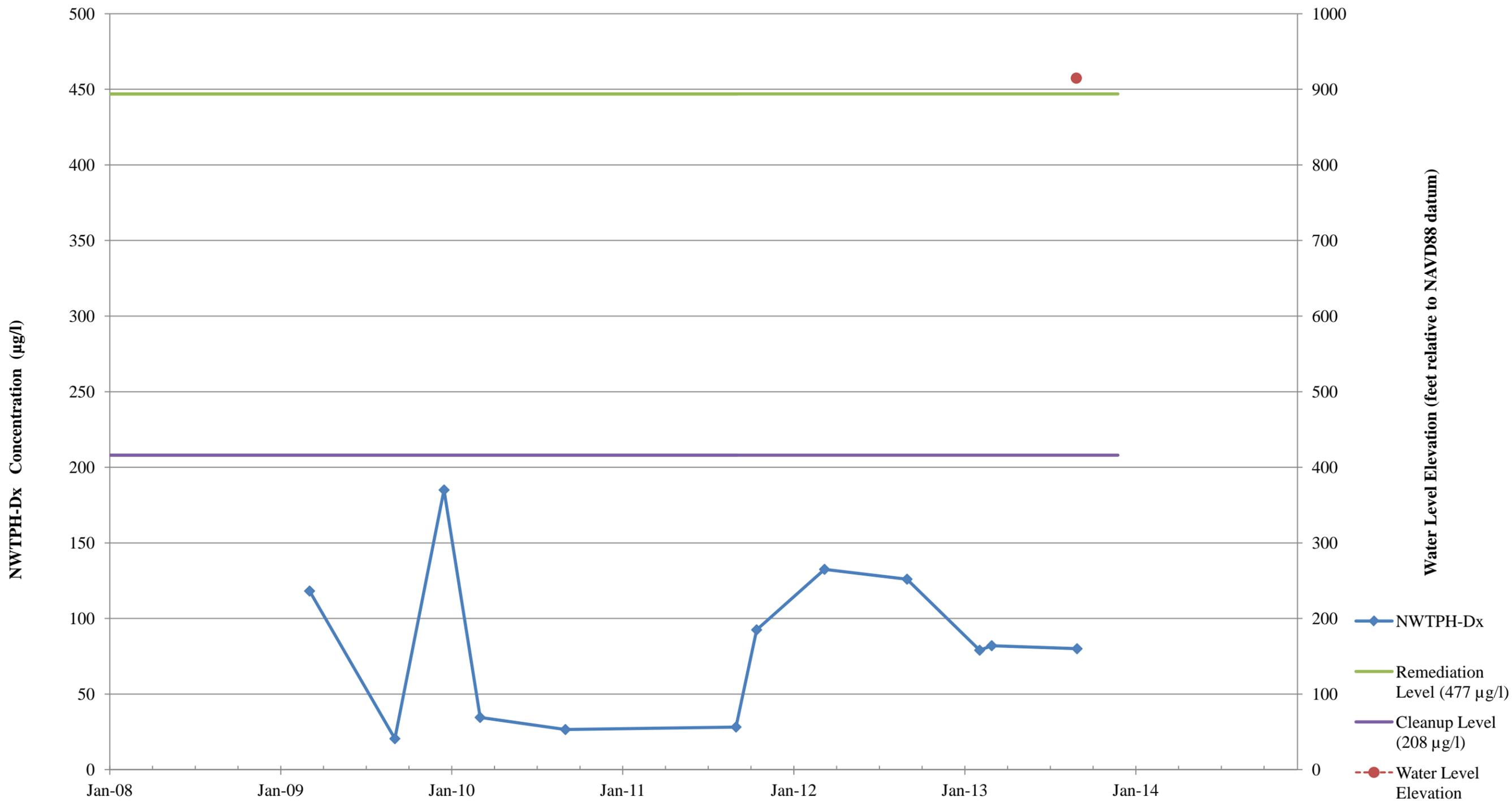
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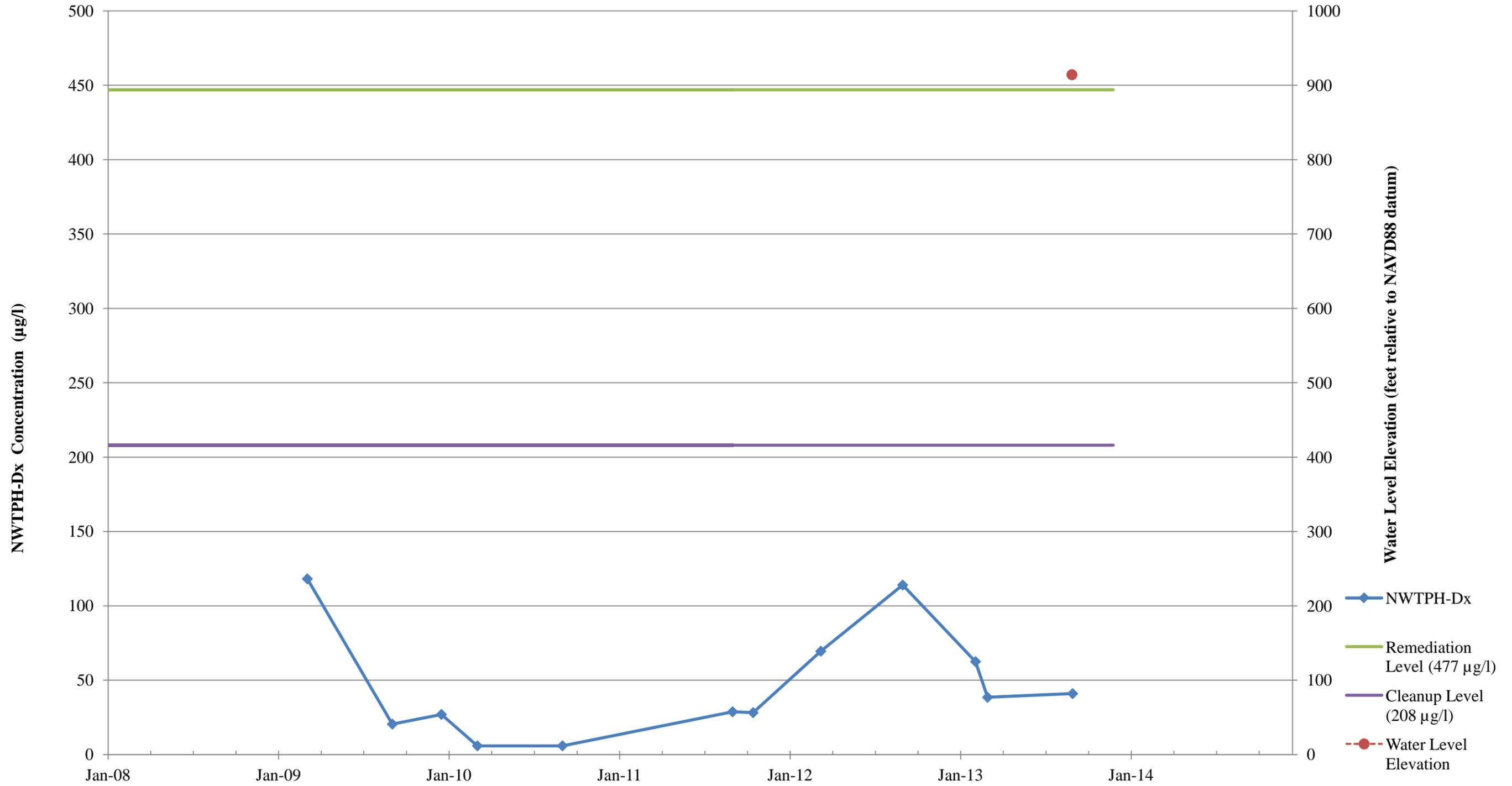
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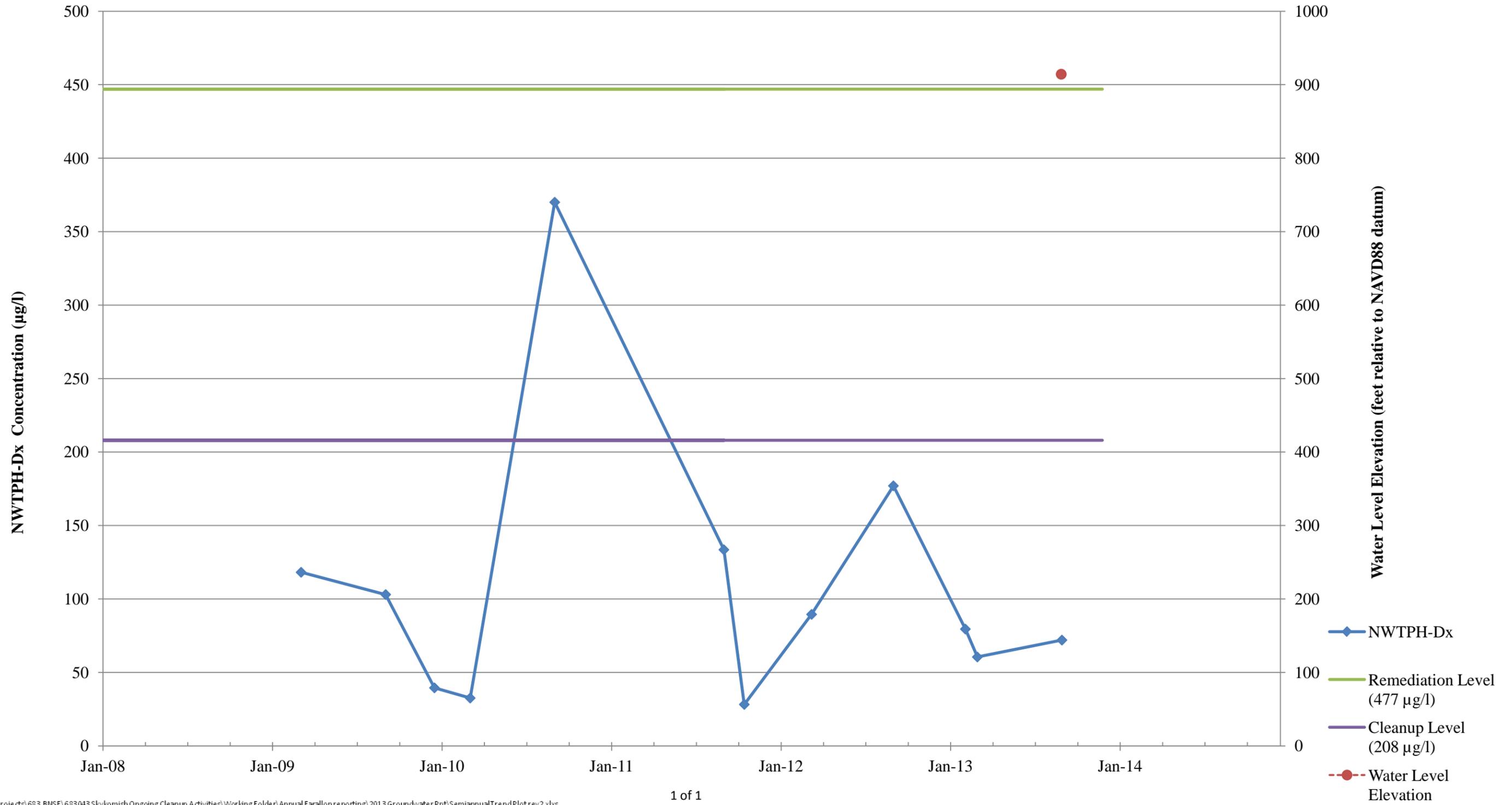
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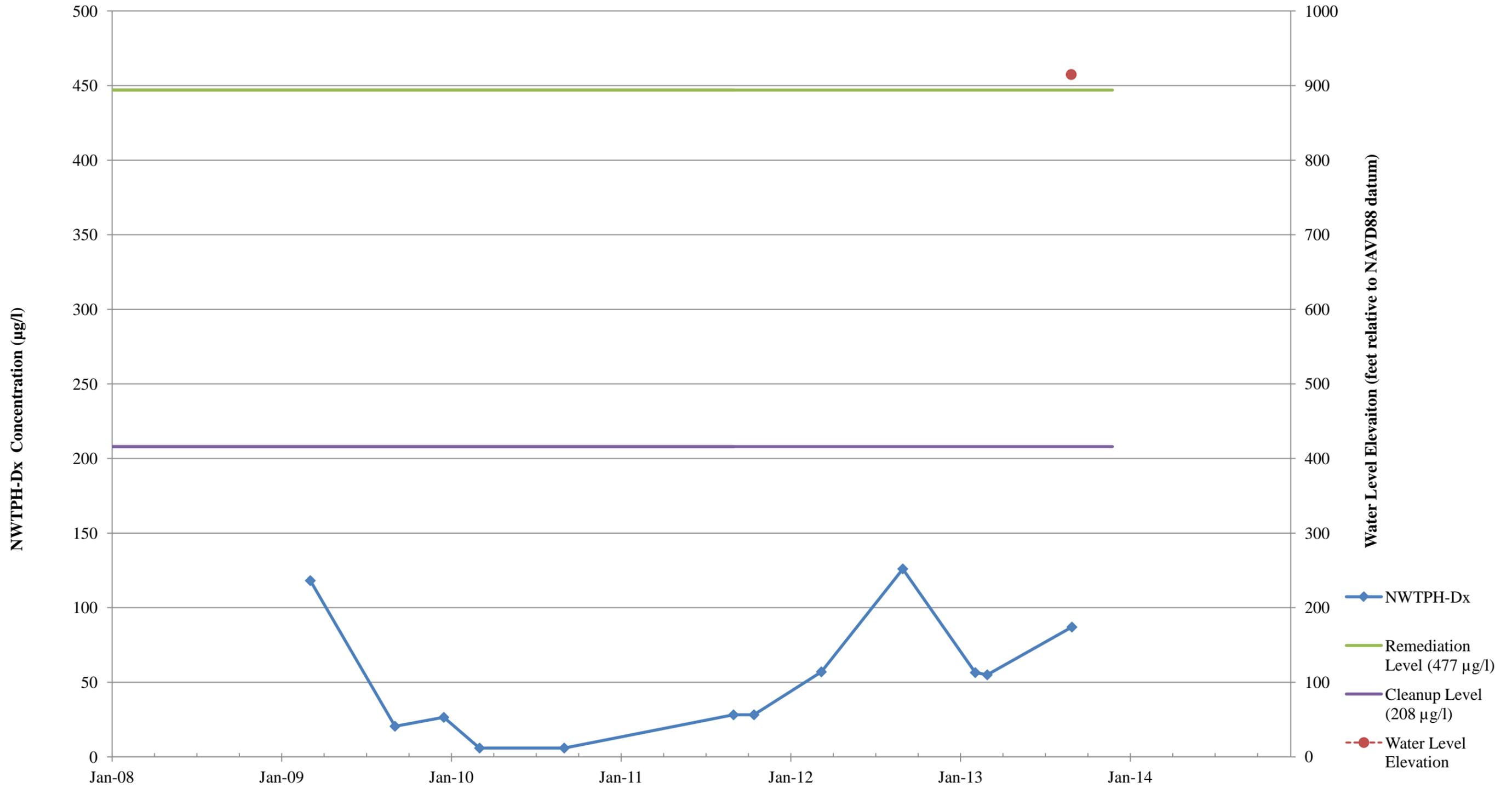
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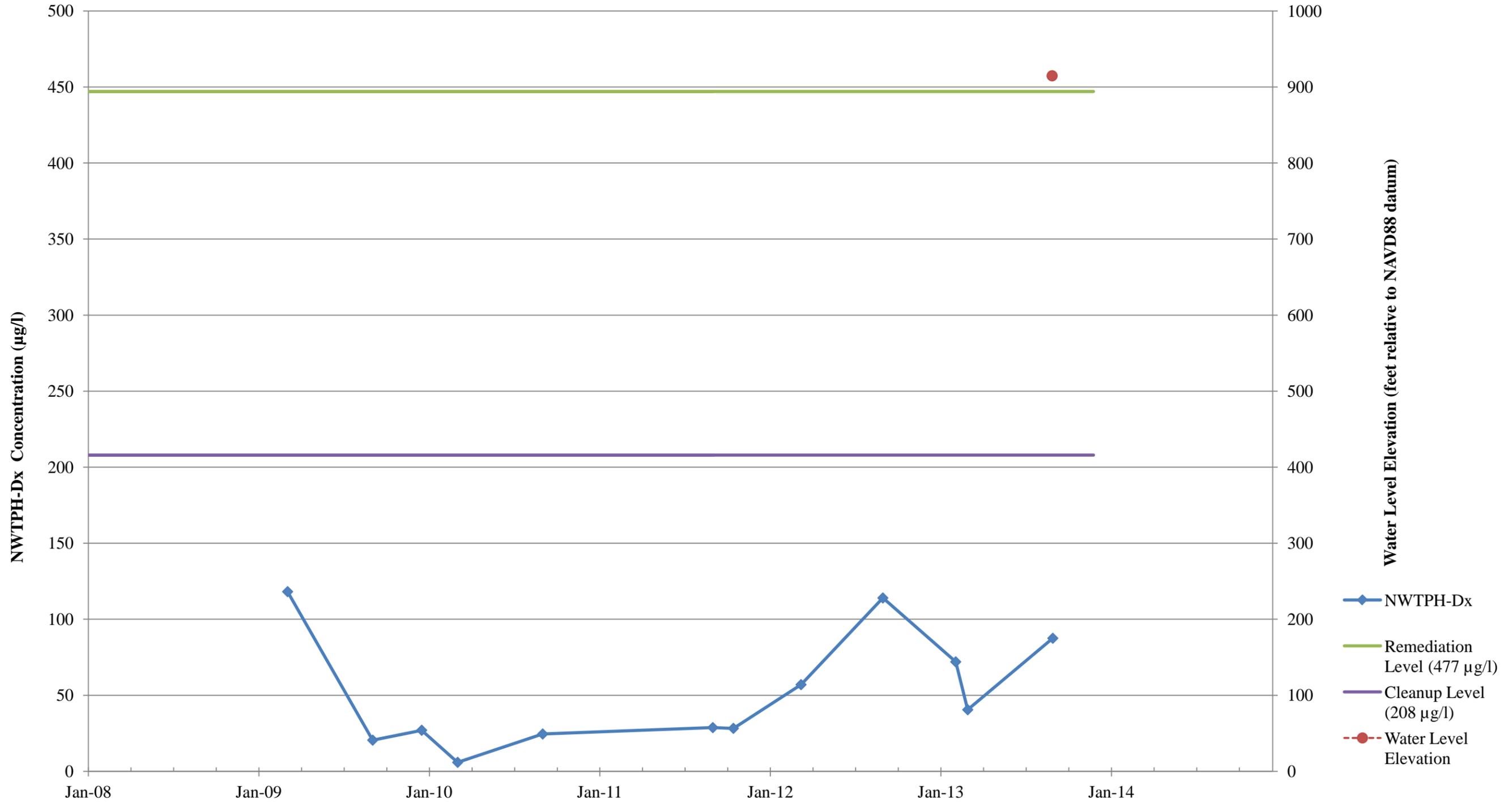
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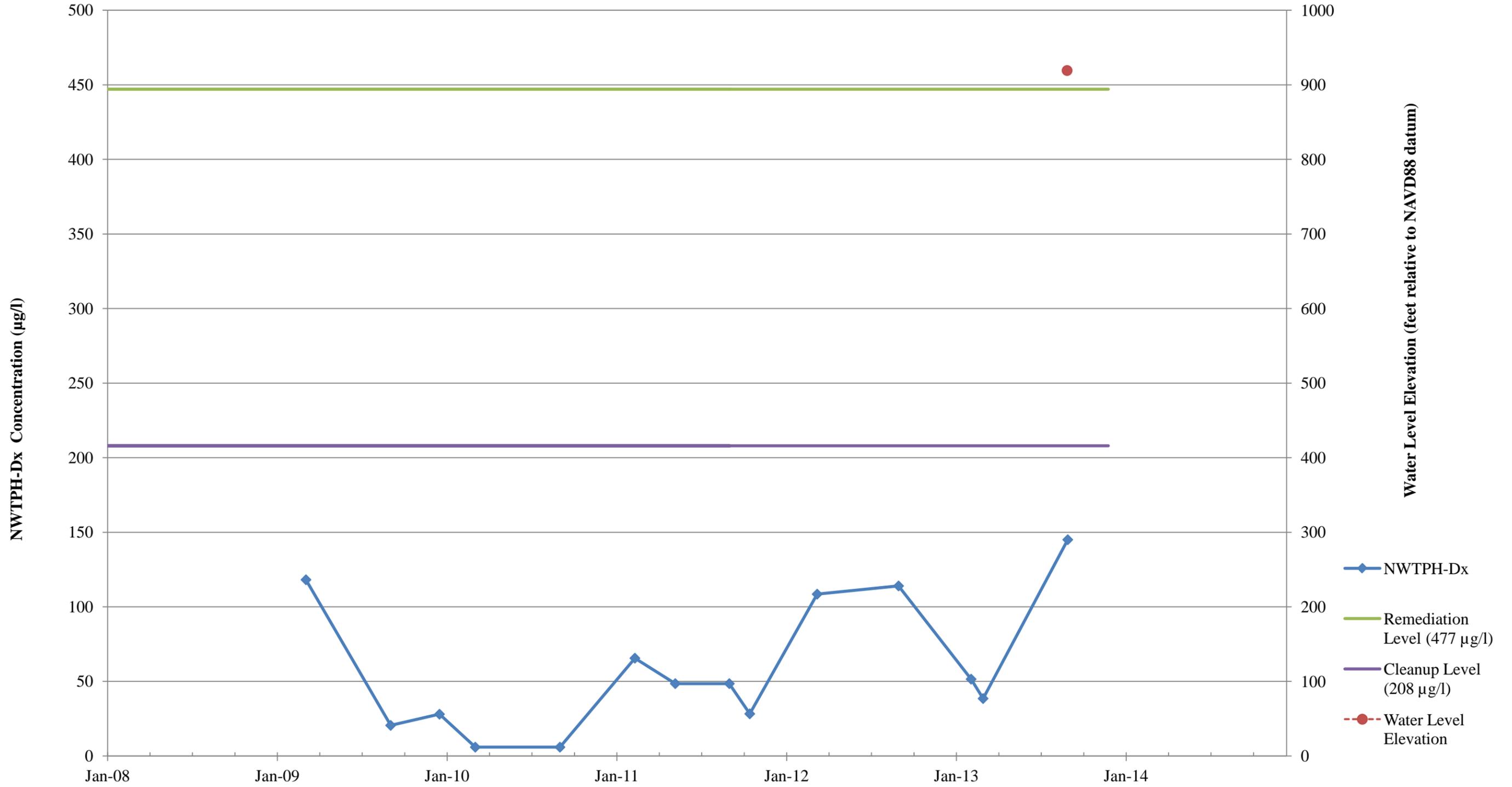
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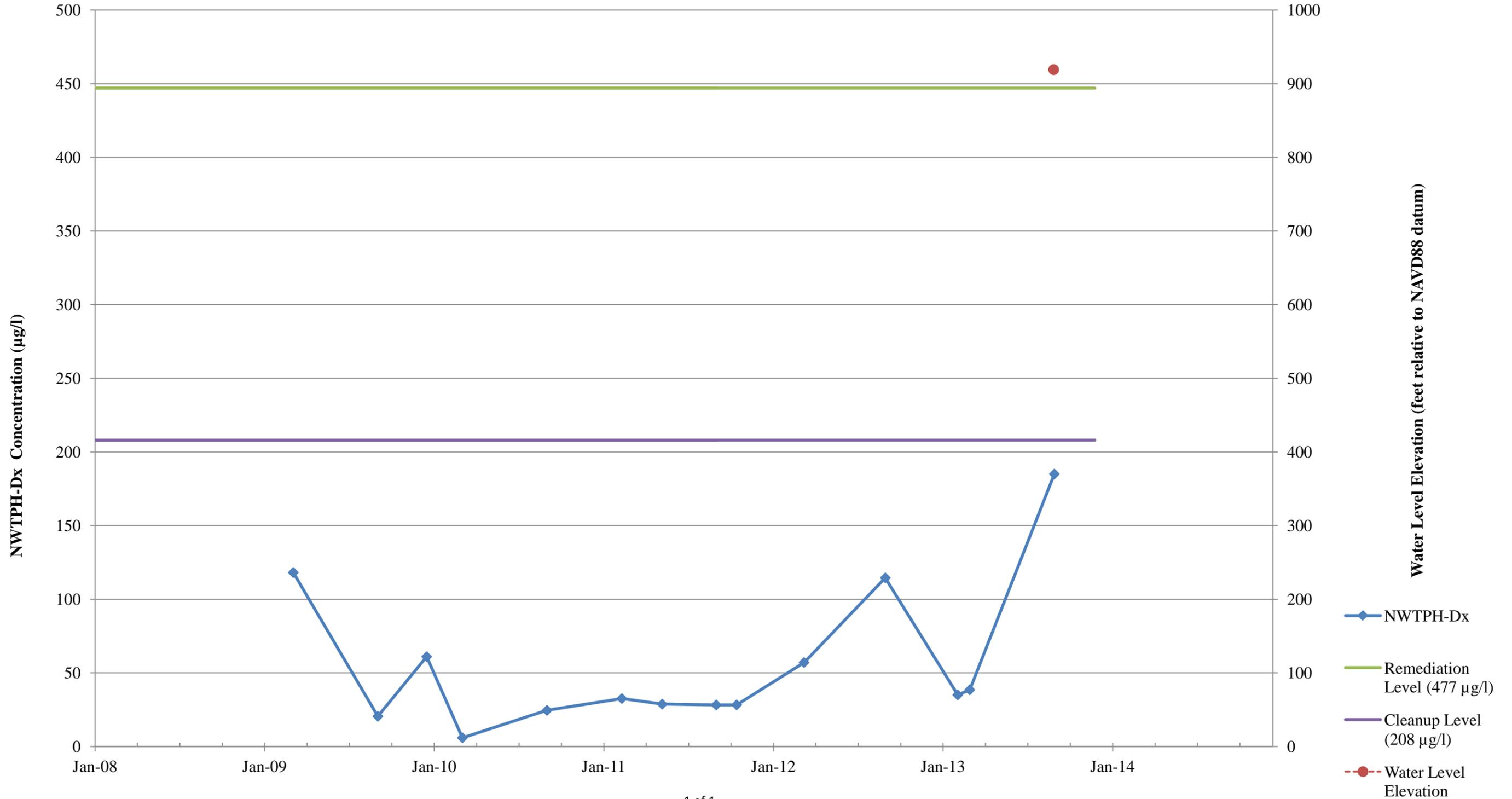
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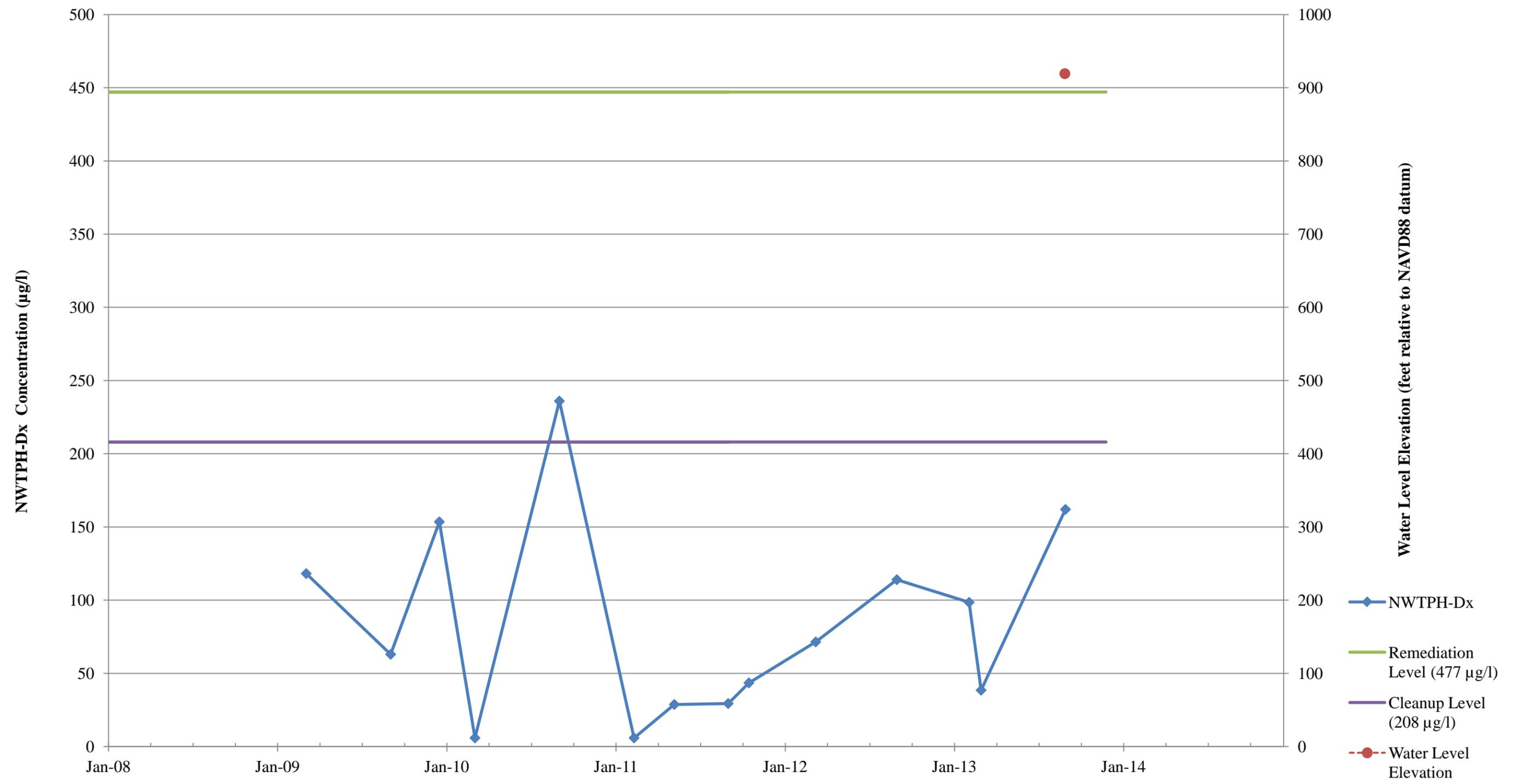
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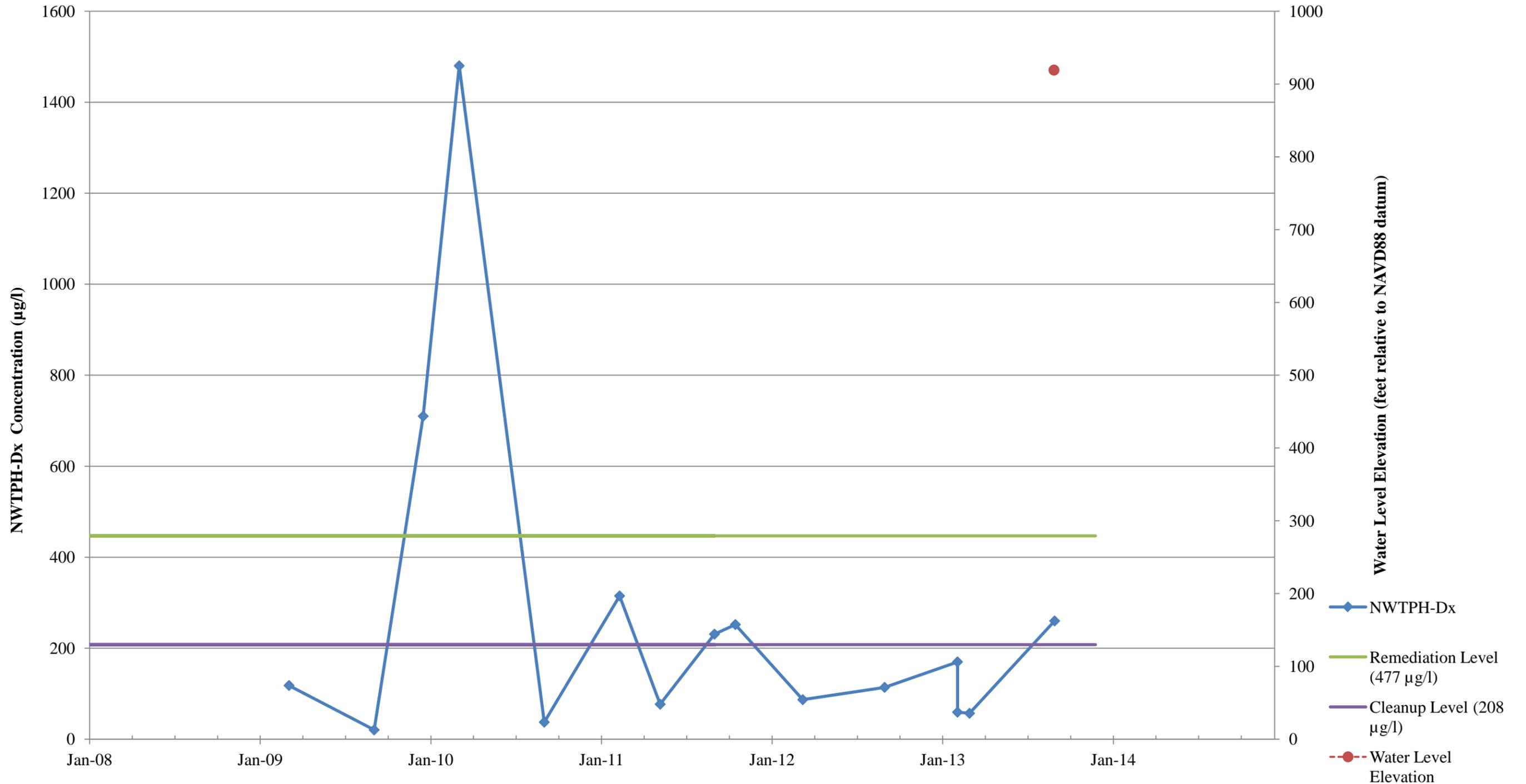
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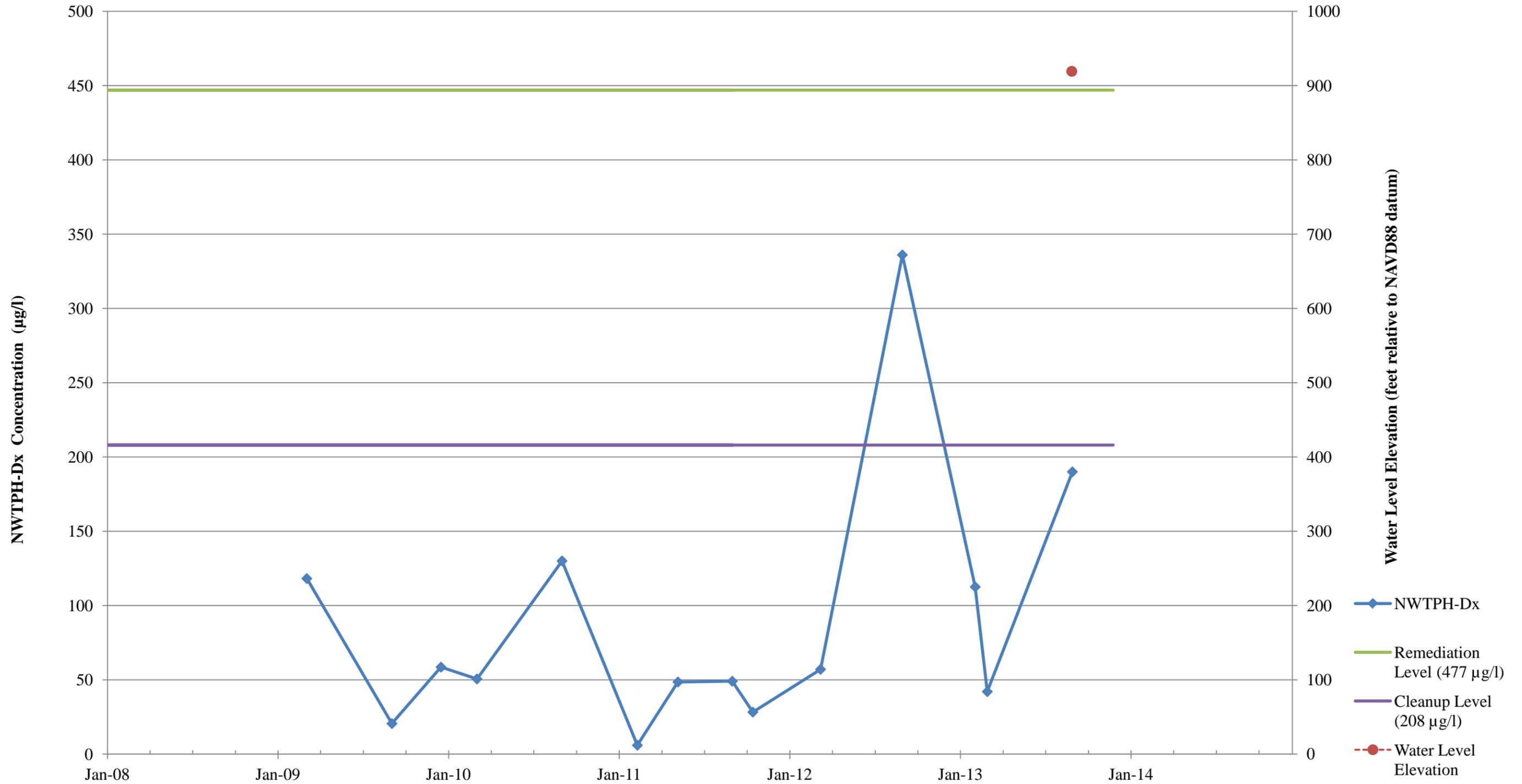
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NWTPH-Dx Trend Plot
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Skykomish, Washington
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NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
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S4-CD



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